

Commentary

Enhancing stakeholder engagement to achieve the sustainable management of free-roaming equids

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Abstract: Wild horse (*Equus caballus*) and burro (*E. asinus*; WHB) stakeholders in the American West are divergent in their views of free-roaming equids on public lands. Management authority for free-roaming equids on designated public lands was given to the Bureau of Land Management (BLM) and the U.S. Forest Service (USFS) in 1971 by U.S. Congress with the passing of the Wild and Free-Roaming Horses and Burros Act (WFRHBA). In 1976, the Federal Land Policy and Management Act (FLPMA) mandated the BLM to manage public lands for multiple-uses, which included livestock grazing, energy development, recreation, and timber harvest. Since the passage of WFRHBA and FLPMA, almost every WHB management option has been met with frustration and contention by some faction of stakeholders. Currently, WHB populations on designated public lands exceed numbers the BLM and USFS determined were in balance with other multiple-uses. Historically, true collaboration around the issue has been lacking apart from the banding together of like-minded organizations. As climate change exacerbates resource impacts on Western public landscapes, leaving already arid lands drier and forage amounts and diversity lessened, the need for true collaboration among divergent stakeholders is abundantly clear. However, how to collaborate sustainably and healthily is unclear. In this paper, we outline a framework, specifically with the BLM in mind, for achieving collaboration with diverse stakeholders and decision-makers.

Key words: Bureau of Land Management, burros, decision-making, engagement, *Equus asinus*, *Equus caballus*, free-roaming equids, multiple-use, stakeholders, tribes, U.S. Forest Service, wild horses

THE WILD AND FREE-ROAMING Horses and Burros Act passed by the U.S. Congress in 1971 federally protected free-roaming equids (e.g., wild horses [*Equus caballus*] and burros [*E. asinus*]; WHBs) on designated public lands (Public Law 92-195 1971, Norris 2018). The Bureau of Land Management (BLM) and U.S. Forest Service (USFS) were tasked with managing free-roaming equids with the goal of achieving and maintaining a “thriving natural ecological balance.” Free-roaming equids are considered truly wild by some, feral by others, wanted and unwanted, revered and annoying, culturally important or nothing more than loose livestock (Scasta et al. 2018). Both horses and burros were to be managed in concert with the multiple-use legal mandates of the BLM and USFS (Danvir 2018). The public lands where WHBs are managed are typically water-limited, remote, and shared by other species, both wild and domestic (Garrott 2018).

The 2020 BLM appropriations request for their Wild Horse and Burro Program budget was \$152 million USD (out of a total BLM budget request of \$1.6 billion; BLM 2020). In a time of climate change, drought, massive wildfires, and exponential growth of recreation and mixed use on land primarily situated in the arid West, an agency responsible for 99 million ha of public land can hardly afford to have almost 10% of its annual budget spent on 1 resource. The sustainable management of WHBs is further exacerbated by the lack of systematic scientific knowledge about free-roaming equid ecology on public lands and by the contention between disparate interests (Scasta et al. 2018, Schoenecker et al. 2021). Additionally, discrepancies between the written management authority granted BLM and USFS by the U.S. Congress in the WFRHBA (e.g., horses can be euthanized) and the day-to-day reality of the WFRHBA (e.g., Congress has stated that fed-



Figure 1. Public land stakeholders often devote their personal time and resources to learn more about how public lands can be managed. Low-tech meadow restoration site in Twin Peaks herd management area near Susanville, California, USA (*photo courtesy of S. Snow*).

eral funding cannot be used for euthanasia of healthy WHBs; Norris 2018) make the issue so divisive that elected officials and federal agencies tasked with managing the resource are stuck, unable to find solutions to the issue. We find ourselves in the midst of what is known as a “wicked problem.” This is a problem that is not easily solved or reasoned through carefully with “if a, then b” logic. The challenge is so layered that even the brightest, solutions-based ideas trip up in the process toward a solution (Balint et al. 2011).

Wild horses and burros have a relatively high reproductive growth rate (up to 20% per year under some conditions), and this leads to rapidly increasing numbers in their rangeland habitats (Garrott 2018). Combined with lack of predation and a limited amount of space, forage, and water for the legally mandated multiple uses and species on public lands, increasing populations have potential to affect sensitive ecosystems for wildlife, plant communities, livestock, opportunities for recreation, and the WHBs themselves (Danvir 2018, Hennig et al. 2020, Coates et al. 2021, Stoner et al. 2021). Loss

of these systems further impacts local and regional economies—a potentially lose-lose situation (Jakus 2018).

In theorist’s circles, “wicked problems” describe planning and social policy issues that are difficult to frame and not so straightforward in their solutions (Balint et al. 2011). This paper explains the issue more extensively and, most importantly, offers suggestions toward resolving this highly complex wicked problem.

Who are the stakeholders?

The highly generalized stakeholder scene is that the general public is largely unaware that WHBs even exist, but when alerted to this fact, they trend towards concerns that horses and burros be treated well (Frey 2019). Within that group, impassioned and vocal wild horse advocates work to ensure that WHB welfare is at the forefront of any management action, better the baseline on protections afforded to the WHBs by the WFRHBA, and fight for consistency and fairness across the multiple-uses on public lands (Figure 1). Though they may appreciate or enjoy them, livestock operators are steadily more per-



Figure 2. Public land managers often engage stakeholders in projects where they can learn more collectively about how to restore impacted rangelands. Here, stakeholders visit replanted sage brush in the Twin Peaks herd management area near Susanville, California, USA (*photo courtesy of S. Snow*).

turbed by growing WHB populations, increasing competition for limited range resources, and degradation of the habitat by WHB overpopulations. Wildlife conservation organizations feel left behind by the persistent positioning of advocates and ranchers, to the exclusion of their concerns for populations of animals and plants that evolved with sagebrush (*Artemisia* spp.) ecosystems. Researchers present their findings and generally make some section of the many stakeholder groups angry, their results perceived as an aggression against whatever organism or system they have found to have some negative impact. Federal agencies responsible for managing WHBs are caught between a rock and a hard place, with litigation coming from every side to gather and remove more horses, gather and remove fewer horses, not gather at all, use fertility control, or to not use fertility control. Federal employees feel pulled in competing directions, punctuated with vitriolic, abusive rhetoric, regardless of any management action they may take (Figure 2). Information about the issue, the agencies, the stakeholder groups and their various projects, and individuals involved

in this issue are vilified, remarked about, and amplified on social media, and the inter- and intra-relationships among stakeholder groups is fractured.

Of course, this is a highly simplified and stereotyped version of major stakeholder interests and their concerns, but it is the starting point for looking into the biggest part of this issue: How can stakeholders be involved meaningfully? How do they gather around the table? How can such extreme distances between stakeholder groups be overcome or better utilized?

Collaboration challenges

Trust

Among these unclear conditions, there is little trust. Decades of perceived and real slights, arguments, and disagreements have firmly placed divergent stakeholders into their respective corners. There is sometimes a belief any person or organization not sharing your beliefs has no positive attributes. Further, there is a lack of faith in the decisions made by the agencies, or even other stakeholders, and this results in little respect in any direction (Madden 2015).

Finding common ground

The most common sentiment we hear from those who are knowledgeable about WHBs is that there is no middle ground. We propose an alternative. In conducting interviews with >45 people intensively involved with this issue (D. Adams, The Langdon Group, unpublished data), we found 4 areas for building common ground.

Conditions on the range are not what they were. There is general concern that drought-stressed landscapes do not have sufficient water or forage to support WHBs, livestock, or wildlife and require prioritization in terms of management. However, there is worry that prioritization will favor 1 special interest over another.

To address this concern, we must acknowledge that what is unappealing to many advocacy organizations is that potential solutions and improvements move all too slow in contrast to the breakneck speed at which large-scale gathers occur (e.g., how then can animal-welfare protocols be carefully followed), the negligible or non-existent amounts of fertility control utilized, and the perception that WHBs are being removed while other uses persist. The middle ground would seem to be reducing the speed and size of the gathers so that animal welfare can be at the front of all concerns and so that staff and contractors can continually refine and improve the work, with interested stakeholders meaningfully involved in that improvement process. Further, opportunities to prepare for successful, well-implemented fertility control programs, which require training, staff, holding or processing facilities, contractors and contracts, and National Environmental Policy Act analysis, have time to be put into place and fertility control can be scaled up alongside gathers (see below).

However, this compromise, at least in places, may be at odds with the above bullet point: that conditions on the range are not what they were. Climate change dictates that management actions are prioritized differently than in the past. Land managers have the delicate and important job of balancing use, values, and science—not a simple or enviable task.

A 2013 report from the National Academy of Science (NAS 2013) digs into the social considerations of wild horse and burro management, noting the conflicts around their management

and remarking that those conflicts “illustrate why policy to manage the free-ranging population should be carefully attentive to divergent public values. It is important to have a management plan that accounts for the opinions and concerns of a variety of stakeholders—not only scientists and advocates but a variety of community members and parties that may have strongly held perspectives on the issue...Decisions will have to take these values into account” (240–241). It would behoove the agencies, then, to have comprehensive, accessible information about additional uses (e.g., grazing, mining, recreation, cultural, ecological, etc.) on those same public lands that is current, accurate, and easily available to researchers and stakeholders.

Fertility control. While there is no consensus as to the types and methodologies of fertility control that are “more” or “less” (or not at all) acceptable by stakeholders, there is broad support for the use of fertility control for population management, especially when it can reduce both the numbers of individual WHBs that would need to be gathered off the range and the number of gather events overall.

Implementation of fertility control is not without its own set of logistical challenges. First and foremost is the sheer volume of WHBs that require fertility control to stabilize the population of animals on the range. There are excellent, well-researched immunocontraceptive vaccines available now for use, but the agencies have been unwilling or unable to implement programmatic use of these vaccines (Bechert et al. 2022).

Diverse stakeholder support for these methods is part of why an institutional paradigm shift is now possible. Determining which methods of fertility control will be acceptable to stakeholders is a conundrum that both agencies and researchers face. Development of longer-acting, least-invasive fertility control methods is desirable by the agencies as well as to most stakeholders, who would like to see the number of times a WHB must be gathered for treatment, or remotely treated via dart, reduced (due to logistics, welfare reasons, or both).

Protracted conflict, implicit bias, and the single-story narrative. Implicit bias and the single-story narrative refers to mindsets that have to be overcome, especially if there has been protracted conflict.

Implicit bias is the attitudes we have toward

people or associated stereotypes of them without our conscious knowledge. Single-story narrative was developed by Adichie (2009) and describes the overly simplistic and sometimes false perceptions we form about individuals or groups.

The single-story narrative creates stereotypes that may or may not be true but are often incomplete. Whenever there is highly complex or enduring conflict, intimate stakeholders often wrap their personal identity with that conflict. We have found that most people feel that their story has never been heard. They do not feel respected, nor their knowledge or experience understood. True collaborative stakeholder work allows people to tell their stories to others who have divergent views yet who will truly listen and hear them. This is part of developing trust between historically conflicted individuals or organizations and will better facilitate communication of needs. This is a particularly challenging portion of building collaboration because if a group or individual's identity and self-perception are inextricably tied to an issue, it is difficult to separate from that identity and express needs that others can really hear.

Implicit bias and the single-story narrative run rampant about and within every WHB stakeholder group. However, whenever disparate groups physically visit rangelands together, they often walk away with a different perspective and a new appreciation for individuals or organizations they had previously thought of as ill-informed or adversarial. The tried-and-true path to removing the barriers of implicit bias, single-story narrative, and accidental adversaries (when a cooperating partner does something that inadvertently harms another partner) is for diverse stakeholders to actually come together and spend time in the environments of concern, seeking to understand each other and build relationships (Senge et al. 1994). Importantly, they begin to discover commonalities. Once stakeholders humanize one another, they can identify common ground and determine what collaborative opportunities exist. This is where problem solving begins: together, they prioritize a list and get to work. This collaborative pattern has proven successful on a wide variety of natural resource issues, including management of timber, fire, sage-grouse (*Centrocercus* spp.), and water resources.

Appropriate management level (AML). In 1978, the WFRHBA, as amended by the Public Rangelands Improvement Act, directed the BLM to manage WHB populations by setting an AML. The AML was set at a maximum of 26,715 WHBs within herd management areas on BLM-managed lands (Public Law 95-514 1978).

A point of contention in WHB disputes is whether science was used to determine AML, if so how, and whether it was fair and/or consistent, especially in relation to the other multiple uses on public lands (NAS 2013). Regardless, most would agree conditions on rangelands have changed since 1971. Climate change, drought, land use, wildfire, urban development, annual grass invasion, conifer expansion, and other potentially negative impacts to rangeland conditions pose ecological challenges that are different from those encountered and anticipated >50 years ago when the WFRHBA was passed. Some advocates may argue that the maximum AML is an arbitrarily low number and that it should be increased. There are other stakeholders who argue that maximum AML may no longer be feasible given changing ecological conditions and should be lowered.

Updating AML to reflect current rangeland conditions and current science, and to equitably include the myriad uses on public lands (each of those uses of which may be contentious to competing or interested stakeholders), concerns many as there is potential for great conflict over the process. It appears to be a pursuit that will lead to protracted divisive litigation that may stymie potential improvements to the health of rangelands, WHBs, and other impacted wildlife (Coates et al. 2021, Stoner et al. 2021). A detailed ecological analysis needs to be conducted by multiple agencies and independent research organizations, and extensive stakeholder engagement from all sides must be included.

Where do we go from here?

The saying “two heads are better than one” encapsulates the necessity for collaboration, even if it is somewhat painful. Special interest groups tend to rely on their own “data,” drawn from like-minded information—similar to how internet algorithms determine which news stories a reader will see. This is a fantastic mechanism for preaching to the choir and keeps us all

comfortable assimilating information that goes along with what we already know and believe. This tactic does nothing for real critical thinking, however. We do ourselves a disservice to listen and believe only information with which we are comfortable, as we will miss important information. If we expand our thinking, and truly listen to others, we may find ideas or solutions outside of our own comfortable belief systems. These may come from learning an additional perspective from someone or an organization you may not have previously agreed with, or through the connections afforded by reaching outside of our comfort zones and interacting with different people who may then have that important connection (Kania and Kramer 2013).

Big changes cannot happen in a vacuum. No singular person or organization can have “the solution” to any complex issue and certainly will not have the resources necessary to provide for the solution or convince everyone and all organizations or agencies required to implement that solution (Kania and Kramer 2013). Real change only occurs when there is broad coordination across many organizations because of the increased number of approaches and diversity of thought that can be brought to bear on exceedingly complicated matters (Madden 2015). This is the only mechanism for seeing what we may have missed (Kania and Kramer 2013).

It is all well and good to say “work together,” but what does that mean exactly? In a nutshell, it means thoughtful leadership, appropriate involvement, and engaging others with kindness and respect—simple enough suggestions, but nearly impossible to maintain in the noisy world of social media, especially when collaboration would seem to indicate that everyone has an equal voice, and speaking outside of aligned groups can be perceived as selling out. Sometimes well-intentioned efforts become derailed because having too many involved (that well-intentioned “everyone is welcome!”) can turn a collaborative effort into something too broad, making the determination of desired outcomes impossible (Sterling et al. 2017).

Working together must also include a real understanding of all of the people because natural resource and conservation issues are deeply tied to social constructs (Sterling et al. 2017). In this case, appreciation of the issue and then a deep investigation into human dimen-

sions surrounding WHBs on public lands must be part of any collaborative effort. The opening paragraphs of this essay certainly typecast the players who are concerned and care about WHBs. Unless there is movement beyond such sweeping generalizations, then there cannot be true empathy for others, and engaging without this deeper understanding will prove fruitless (Cullman 2015).

Leadership should include locals, people who are inextricably connected to the lands that WHBs live on and whose livelihoods may be dependent upon those lands. They oversee the management and uses of the rangelands WHBs inhabit, and their experience and stewardship of those lands mean that they must be important and respected leaders of collaborative efforts (Sterling et al. 2017).

But leadership does not necessarily mean 1 person or entity, or even a core group of a few. Sustainable efforts have, for lack of a better term, cheerleaders, who can poke and prod uncomfortable steps forward and support participants throughout tedious processes. They also make certain that within an ever-changing group of interested people, all are participating meaningfully. Stakeholder work is not for the faint of heart.

Lessons learned from American Wind Wildlife Institute

It became apparent to people involved with wind energy and wildlife interests that an entity would need to be created to manage the complex challenges of a changing climate, the need for sustainable energy, and the impacts to wildlife. With a shared goal of minimizing negative impacts to the environment, and a commonality that climate change made it necessary to continue to broaden the types of energy upon which we rely, leaders in wind energy and wildlife conservation began the work of putting together an organization that would guide this process.

The American Wind Wildlife Institute (AWWI, now known as the Renewable Energy Wildlife Institute) is an example of divergent stakeholders finding common ground (AWWI 2018). In 2008, leaders in wildlife conservation, wind energy, and scientific organizations came together to solve “wind wildlife challenges for a sustainable energy future” (AWWI 2021*b*). Forty-one odd bedfellows such as Defenders of Wildlife,

Ducks Unlimited, and the renewable energy company Siemens Gamesa chose to assess the risks of wind energy on wildlife and develop, together, scientifically relevant and cost-effective solutions.

This interleaving of experience and perspective results in stronger, cross-pollinated ideas. We cannot stand only on our own ground without at least consideration for the ground others may stand on and see things from. Again, as modeled by American Wind Wildlife Institute: “AWWI’s CEO and Executive Leadership Forums play a critical role in convening decision-makers from organizations that span a wide breadth of perspectives on wind/wildlife issues. AWWI’s focus on consensus-building around scientific evidence has created an atmosphere of trust that enables individuals with differing concerns and priorities to coalesce around shared values and find common ground” (J. Page, director of Renewable Energy and Wildlife, Defenders of Wildlife, and 2021 AWWI board vice chair [AWWI 2021a]).

The WHB issue is unique and tricky, but it is not the only issue of its kind that has occurred—we can and must take lessons from other, similar conundrums. Though wicked, these problems are not unsolvable. They do require a level of engagement and commitment commensurate with the level of complexity. Complex issues often require complex solutions, and the effort must be equal to the challenge (Balint et al. 2011). There is an aversion to engaging in the level of conflict that the WHB issue contains, but as we are learning from AWWI, it can be done.

Disparate stakeholder groups need a driving issue to coalesce around. For AWWI, that driver was climate change and the need to find a way around reliance on fossil fuels. If each individual organization affiliated with AWWI continued to remain entrenched in whatever their particular agenda was, change might occur, but it would not be sustained change if some groups were considered “winners” and others “losers” with the invariable switching of positions later on down the line.

In the WHB issue, climate change and drought should be our driving issues. As stated earlier, WHBs primarily exist in arid landscapes (Garrott 2018). Multiple uses on public lands are challenging under ideal circumstances, but with

protracted drought, these landscapes will not handle the burden that multiple-use management places upon them. The environmental conditions in these fragile places are different than they were when public land policies such as the Federal Land Policy and Management Act (Public Law 94-579 1976) were put into place, but adaptive research and planning by federal agencies has not kept up (Glicksman 2012).

If stakeholders do not rally around these driving issues—if we do not understand that the dynamic lands WHBs inhabit are under extreme duress and are content with no change or movement—then we will absolutely lose WHBs on our public lands. Climate and conditions will no longer support a myriad of uses, and not only will we lose the wild horses, we will surely lose other multiple uses, from livestock grazing to all other species of wildlife that rely on that system. Simply put, horses and burros will either perish, Congress and stakeholders will grow weary enough to begin to chip away at the 1971 WFRHBA, or both.

A new pathway needed

Some new pathways to collaboration in the WHB issue have emerged in recent years, but these efforts have not been without challenges. Meaningful collaboration takes continual adaptation, but it can be plagued by the perception that efforts are being conducted in secret, without important stakeholders, making it a daunting task. Well-considered and balanced participation is essential, but because that may come with perceptions that organizations are “left out,” constant assessment of who is involved, how, and why must occur. Being intentional matters. Curtis et al. (2014) showed that successful collaborative projects that resulted in shifted attitudes toward conservation efforts included 4 main ideas: (1) All stakeholders made decisions together, (2) all processes were inclusive, (3) decisions and how they were made were transparent, and (4) there was a high degree of trust within and between the groups and the agencies involved. These are tall orders, and if they are at odds with the identity of a group or individual, then participation by that group could be perceived as risky. In an ideal world, it would be understood that stakeholders do not all think alike and it is acceptable to be involved in collaboration or to not be

involved in collaboration.

The Free-Roaming Equid Ecosystem Sustainability (FREES) Network (<https://extension.usu.edu/freesnetwork>), which operates as a clearinghouse for stakeholders to meet and share their expertise or ideas and then guides cooperative efforts between groups who have discovered one another through that networking, has picked its way down the somewhat rocky roads of the ideas of Curtis et al. (2014).

Within a diverse and divergent collaborative group, even one in which every individual and organization is committed to working well together, understanding the human dimensions, including the backgrounds, experiences, and beliefs of the participants, helps decrease conflict (Madden 2015). If we disregard “the other,” then it’s easy to dismiss their concerns and that does not further cooperation. Because of complexities that span an issue and the groups that feel concerned or involved, rules for interaction help to reduce misunderstandings and assumptions. Many changes in a complex situation cannot be controlled, so rules are necessary to keep a diverse group focused (Kania and Kramer 2013).

The rules that collaborative stakeholder groups must follow in the wild horse and burro issue include things such as: refraining from disparaging others expressing a view different from yours either in that physical setting or later on social media, “seek first to understand” (Covey 1989), and focus on “interest based” versus “positional” engagement (Moore 1986). Moore (1986) advised that 3 needs have to be met to have an interest-based approach that stands the test of time. Those needs are: (1) procedural (process, who, how), (2) substantive (data, science), and (3) psychological (trust, past relationships, interpersonal interaction). Successful collaborative engagement is built around meeting these 3 needs for all stakeholders. Whatever solutions are sought to improve these wild horse and burro issues, it will be essential that each of these 3 needs are met.

Within the still noisy and contentious WHB issue, there is new direction. Organizations that had historically been in conflict have come together, listened, and humanized one another. Is it perfect and has every organization come along? Certainly not. But it is an improvement. For example, because of just those simple-sounding

steps >90 groups through and around the FREES Network have developed a shared understanding from different perspectives. There is now a strong, unified movement to increase fertility control—the elusive common ground.

A caution, however, is justified at this point. Collaborative groups have coalesced around conservation or wildlife issues in the past, even around WHB issues in the past, and the efforts have not always lasted long. There is a life to these organizational efforts, with the building and growth of groups working together, and then a period of senescence. That can be followed by the splintering apart or dissolution of the effort. Sustainable work is tedious and requires thoughtful processes to maintain a group through years of growth, change, and practicality.

Today, there are increasing numbers of collaborative groups tackling very tough issues and standing the test of time. Some of the attributes of these groups include sustained focus on what the issue is they are trying to tackle and avoidance of mission creep. This clarity increases the likelihood of engaged participants and financial support. Lastly, collaborative groups need to be able to point to deliverables that come from their shared action. In conservation spaces, this can be things like restoration of water sources, improvements to range forage, or other habitat restoration and improvements.

Whatever is done to better engage stakeholders, agencies, and wild horse and burro management, it has to work within the confines of BLM’s legal authority. This will require bridging all work between Congress, agency leadership in Washington, D.C., BLM state program leads, local management, WHB program specialists, and stakeholder groups committed to collaboration.

Conclusions

Collectively, we cannot afford to ever go back. All stakeholders and the agencies responsible for our public land management are stuck with one another, under the law, and face changing circumstances due to climate change. This is something that must be faced together, regardless of each individual or organization’s ideal. The consequences of failing to come together and of better resource management are not hypothetical. The inability to reach a

middle ground benefitting all has had dire consequences for the animals, multiple uses and resources in dispute, and resulted in congressional inaction and agency mismanagement. Constant states of emergency and reaction are not an option, and so we must continually reanalyze and adapt to answer complex questions such as: what are our public lands for and who gets to make decisions? This requires new levels of engagement, participation, and management. We must learn from and understand the consequences of our actions, then adapt.

It would seem that many stakeholders indeed want similar things: humane, sustainable management of WHBs on lands that are ecologically diverse. We start here, in our commonality, and move forward, remembering that being involved in collaboration around controversial issues, such as the case with WHBs, is risky, but it is not without reward. Additionally, wicked challenges require a long time and patience to repair. And we, whoever “we” are, are not the only stakeholder in the room.

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