

Dear Daryl, Wild Sheep Initiative (WSI), Wildlife Health Committee (WHC), and the Western Association of Fish and Wildlife Agencies (WAFWA) BOD.

After your meeting with Scott (Wed. 01/31/24) you asked for feedback from our committee regarding the 04/10/2023 BRIEF on SOUTH AMERICAN CAMELID DISEASE RISK to WILD SHEEP (BRIEF). We admit to some ambivalence regarding an appropriate reaction after receiving your second brief described in your cover email as the “final brief”. It was represented as coming from the WAFWA BOD, but had no signatures or specific names included. It was labelled as “final” thus we did not feel invited to respond. We don’t even know who we’re dealing with. That unilateral statement was not at all what we had agreed to as the path forward on the phone call preceding our receipt of the second brief.

In our note to you last January, immediately following the phone conversation in which we discussed our extensive response to your initial summary brief, we sent you and Anne a list of the topics that were identified for WSI to address.

“Daryl and Ann,

It was good to visit with both of you this last Thursday. Though you both indicated you were only able to scan our comments regarding the brief, it seemed you had gained a sense of our frustration with Mike’s lack of engagement with us and the ongoing failure to recognize the issues we’ve outlined in our comments for the last three years. Thank you for agreeing to do a more thorough investigation of our positions and to gain a more comprehensive understanding of llama veterinary medicine.

Going forward we discussed:

- 1. Ann doing an extensive literature search, which we think is good.*
- 2. You obtaining a copy of the 2014 edition of Llama and Alpaca Care: Cebra, Anderson, Von Saun, Tibary, and Johnson. We have no extra copies, but you can obtain a copy online (+/- \$120). It would be good for the committee to have as a reference.*
- 3. We will approach Dr. Cebra about helping you understand realities of llama health and any threat posed to wildlife. We would do an introduction and let you discuss the issues with him.*
- 4. You were going to enlist some committee members to join you in doing a detailed review of our comments. We have attached an editable docx of our redlined comments so you can enter your response in another color(blue) within each of our comments so we are aware of all points of contention or agreement. We can take those and determine the distilled essence of your counter position prior to scheduling any meeting.*

We also ask you to reconsider your position that you will not ask the horse or cattle industry to lead the way in implementing a testing protocol for provisional access to sheep ranges that would show the way for a llama protocol. Without exception, llama vets and owners see this as a necessity. In view of their greater disease risks, to give these species a pass because of their greater economic and political weight seriously compromises WSI’s represented position that this effort is paramount to protect the health of wild sheep.

We will await your response and thank you for your time. Thank you.

The ad hoc committee for public land access for llamas

Scott Woodruff

Phil Nuechterlein

Stan Ebel”

It was agreed that you would read our corrected and expanded copy of that brief. You were going to read what we had submitted, form a smaller review committee, consult the additional veterinary research sources we listed and craft a critical response to the corrected brief. Instead, we received the unilateral "final brief" from the WAFWA BOD without signature demanding more llama disease data to ignore. On the basis of your 30 year history of willfully ignoring llama disease researchers you demand slap dash testing for a disease that is undocumented in llamas. Additionally, we found this unsubstantiated Brief posted on the WAFWA website as an official WAFWA position that effectively expands WAFWA 2012 and WAFWA 2016 to now include llamas with no disease occurrence attributed.

WAFWA-WSWG-WSI Captured by Wild Sheep Foundation (WSF)

What we have feared and suspected is apparent. WAFWA/WSWG/WSI has been captured by the Wild Sheep Foundation (WSF) and the BC/Canadian representatives on WSI and WSF are in control and they want llamas off public lands. When comparing Canada and the U.S., there are some divergent and incompatible philosophies regarding management of public lands and the public wildlife resources they contain. Canada favors aristocratic wild sheep hunting on public lands guided by the professional outfitter/guides (OG's) that founded and operate the WSF. Maximizing control over hunting access and the revenue it generates is prioritized over providing public hunting opportunities on government lands.

Conversely, public lands access in the U.S. favors equal access for all citizens for multiple uses. Hunting access is based on Teddy Roosevelt's stated philosophy; "Preserve large tracts of wilderness ... for the exercise of the skill of the hunter, whether or not he is a man of means." The money interests of WSF and their historic influence over Canadian wildlife managers has spilled over to U.S. wildlife managers who have been convinced to protect the WSF agenda and to share the tag auction revenue that promises to follow.

U.S. wildlife and land managers are allowing the insinuation of Canadian policy on sovereign U.S. lands and the wildlife they support at the expense of U.S. citizens and user groups who own the lands and wildlife assets. [This quote from Wild Sheep Working Group \(WSWG\) Chairman, Mike Cox' 03/08/18](#) email in response to us questioning the posting of the 2017 publication of "Risk Assessment on the Use of South American Camelids for Back Country Trekking in British Columbia". Centre for Coastal Health, directed by Dr. Helen Schwantje, (CCH'17) on the WSWG website signaled this trend.

"Along those same lines, I also realized that all the previous WSWG chairs have been from the U.S. focused on bighorn sheep and that we needed to make more of an effort to post information on thinhorn sheep management issues and issues of concern in Canada."

We've seen no scientific information specific to thin horn sheep that suggests they are more naïve to disease than Bighorn sheep, thus necessitating special consideration of Canadian concerns. Their concerns all revolve around arbitrarily limiting hunting access supported by means other than equine support and or aircraft that are employed by WSF OG's.

Using WAFWA and the image of international collaboration to supposedly generate "best science", we find they are generating best control of public lands and assets while ignoring best science. Under the guise of protecting wild sheep, control of sheep hunting and their management is being ceded to WSF, a 501(c)3 NGO promoting the hunting interests of WSF OG's. WSF is serving as the vehicle to bridge the international divergence of two sovereign countries' land management philosophies to favor Canadian interests and those of WSF. This amounts to interference with free trade by attempting to create a basis to limit the llama industry's access to sheep ranges on U.S. public lands to the benefit of the WSF.

WAFWA Ignores NPS Canyonlands Precedent; Embraces Pseudo-Science of CCH'17

FNAWS (WSF predecessor), and the Desert Big Horn Sheep Society (DBHSS) efforts to ban llamas based upon the false accusation that pack llamas pose a risk of disease transmission to Desert Bighorn Sheep has been in evidence since the NPS-Canyonlands-South East Utah Group (SEUG) ban was proposed in early 1994 and ultimately abandoned through legal challenges to the BLM and DOI-SEUG in 1997. The ban was determined to have no basis of disease threat, yet BC and the NWT have continued their advocacy for llama bans. The only plausible reason for this stance is ostensibly to eliminate the use of llamas in wild sheep ranges. If private citizen hunters can use llamas and conduct unassisted hunts, they will apply for limited sheep tags expanding the pool of applicants and decrease the number of hunters who would require outfitter assistance to conduct their hunt. These llama-enabled sheep hunters would compete for the already limited tags and successful private applicants would not need the expensive guided hunts that now rule sheep hunting. Non-hunting llama use in those ranges is also deemed disruptive to the work of WSF scouts tracking sheep movement for the effective placement of their hunters.

Agency ban attempts have progressively become more frequent and aggressive as the WSF spread disease disinformation in podcasts, press releases, thin horn sheep summit gatherings, and their North American Conservation Vision 2020 (N.A. CV2020) document about llamas. These ban attempts have failed when the llama community became aware of them in time to offer comment with informed citizens and professional veterinarians within the Environmental Impact Statement (EIS) process for land management plans. Lack of notification to our established user group, a stake holder, is in violation of the National Environmental Policy Act (NEPA) and has been a frequent agency strategy. All-successful ban initiatives have involved this NEPA violation. Our committee was formed when we became aware of the CCH'17's existence. Lacking scientific basis, some agencies were referencing the CCH'17 Risk Assessment even before its release, anticipating it would provide disease information for llama bans, as promoted and promised by the WSF.

2017 Thinhorn Sheep Summit II Synthesis and Summary (THS'17) WSF/Dr. Schwantje Directing CCH'17 as Basis for Banning Llamas

We discovered the [2017 Thinhorn Sheep Summit II Synthesis and Summary](#) on the WSF website. The CCH '17 was being crafted at that summit and the synthesis provided a narration of the process, the people involved, and the strategies to use the RA's. While banning llamas was a prominent topic, no specific disease was ever mentioned. We did a thorough analysis of the CCH'17 RA, conferred with llama researchers and wrote a [commentary](#) evaluating methodology and data and found the RA seriously lacking scientific basis. We included the role of WSF in crafting the RA as described in the synthesis doc.

Public Land Access AD Hoc Committee Contacts WSWG

We did note with alarm that Mike Cox was in attendance as the chairman of the WSWG working group and contributing to separation policy formation. The WSF's Gray Thornton and Kevin Hurley directly instructed Cox and WSWG members how auction tag proceeds could be applied to their projects involving wild sheep. This was our first inclination that WSF was buying influence with WSWG. In early 2018 we found the CCH'17 posted on the WSWG/WAFWA web page. That was the point at which chairman, Mike Cox, was contacted. Initially, there was engagement and concern from Mike over the

posting of the RA and he offered assurances he had nothing to do with CCH'17. It was ultimately taken down because it was hypothetical. ([WSWG-Cox-email-communication](#))

Our committee maintained contact with Mike and WSWG on behalf of the llama industry and was hopeful they would issue a definitive statement regarding the CCH'17 lacking evidence of reasonable suspicion for llamas posing a disease threat to wild sheep populations. Mike confessed ignorance regarding llamas as a species and their associated diseases which prompted us to submit four different compilations regarding llamas and associated disease information over the next three years. (WSWG-email-correspondence: [04/07/20](#), [06/23/2020](#), [08/11/2020](#), [07/13/21](#)) We included a detailed history and the evolution of Dr. Schwantje's RA's ('03,'05, and '17) which were all self-identified as hypothetical and not peer-reviewed. We received no questions or feedback. If Mike read them, he didn't share them with the committee. The first response we received was following our third submission when Mike told us we needed to test to provide a dataset to appease certain members of the committee. Those members were the BC/WSF bloc. He and WSWG ignored the data and resources we placed at their disposal.

WAFWA-WSWG Align with WSF to Support BC and WSF Use of CCH'17

It calls into question WAFWA's legitimacy as science-based: *Advancing Collaborative, proactive, science-based conservation.....* Instead of engaging and learning about the history of llamas in North America and their ability to contribute to the protection of wild sheep, WSI/WSWG partnered with the WSF to advance their llama ban narrative. They chose political expedience to appease Canadian policy preferences over the legitimate science that is relevant to wild sheep. They tasked WSF member Clay Brewer with writing, in part, the original brief which explains the continued reference to the list of bovine diseases put forth hypothetically in the CCH'17 RA as the most current dataset for diseases in llamas.

Dr. Schwantje Questions Use of RA's for Determining Policy

The WSF/WSI clings to this list of bovine diseases despite the collusive fabrication apparent in the WSF's 2017 (THS'17). Brewer's participation in that Summit explains why his brief centers around CCH'17. It represents the boundaries of his limited knowledge regarding llamas. Dr. Schwantje submitted her RA's with the disclaimer they were hypothetical, and they had very little input from llama researchers, yet proceeded with the recommendation that llamas should be separated from wild sheep ranges. She later acknowledged in an [email to a committee member](#), none of the RA's were peer-reviewed and the RA's should not be used for policy formation or ROD's.

"The paper was not published and therefore not submitted for peer review"

"Both documents have repeatedly been reported inaccurately, a disease risk assessment simply describes risk, it's up to the entity that is making a decision on that risk how they use it. In our case in BC, the RA was part of the reason that the use of camelids is not allowed for the purposes of hunting in part of northern BC.

I hope that this helps.

Regards,

Helen"

Dr. Schwantjes failed to respond to noted llama researchers ([Dr. LaRue Johnson](#), [Dr. Murray Fowler](#), [Dr. Gregg Adams](#)) who dismissed all three of her RA's after their publication as without merit and she

admitted in a [2020 podcast that she wished her RA's being used for denial of public land access would never have come up](#). In view of the disqualification of her RA's and her admitted ambivalence she should withdraw all three of the documents. The compromised RA's are all the WSF-WSI uses as documentation.

This Q&A exchange further reveals Dr. Schwantjes ambivalence regarding llamas as a disease threat as well as those of another researcher.

Bighorn Domestic Sheep Working Group (BHDSWG) Science Symposium – June 10, 2019

[Post-Meeting Q&A \(Llama questions\) Sent Via Email to Speakers](#)

Question: Over the last 25 years, some members of the wild sheep community have repeatedly included llamas with sheep and goats for separation from wild sheep. This happens in spite of the fact that llamas have undergone pen studies with wild sheep that show them not to carry M. ovi and other pathogens associated with polymicrobial pneumonia, the major cause of mortality in wild sheep populations. Llamas have no endemic diseases and as Tylopoda/camelids have a wide taxonomic separation from Ruminantia/bovids, including sheep, goats, & cattle. Yet the diseases endemic to these bovid species are cited as reason to consider separating llamas from wild sheep despite no documented occurrence in llamas. At the same time cattle are not recommended for separation and are even considered as replacement species for domestic sheep and goats. Can you explain this reasoning?

Helen Schwantje: This issue has been raised and examined with more than a decade gap to add new published material on risk of transmission of infectious diseases/pathogens, including non-respiratory pathogens from camelids. **Almost none of the material was from camelid health researchers.** We did not have an agenda to persecute the species but had these RAs performed by a third party using standard methods. BC does have the responsibility to protect species that we believe are naïve to livestock diseases, including those carried by camelids. As BC has global responsibility to protect Stone's sheep - a thimhorn sheep, we took the step of repeating the RA. We also had **anecdotal information** that one disease that can be carried by llamas was introduced to an area where mountain goats declined with that disease ([Contagious Ecthyma](#)) and llamas were used for packing. [We could find no other reason for that disease introduction.](#) There are pathogens that can be carried by camelids as hosts (with or without major impacts) but **I wish we knew more about their carriage of pathogens as temporary hosts. Is it possible? We have little evidence but as you all know, lack of evidence is not proof.** These risk assessments were simply circulated, and they are available as resources to take or leave. **British Columbia did use them to support one proactive regulation controlling camelids (and other small ruminants) so that they may not be used for packing for the purposes of hunting in the northern regions of BC.** That is the only action taken to date that I know of. The workshop that was held on June 10 was around domestic sheep, not these other issues.

Her default position regarding llamas remains this non-specific, unsupported statement: *“There are pathogens that can be carried by camelids as hosts (with or without major impacts) but I wish we knew more about their carriage of pathogens as temporary hosts. Is it possible? We have little evidence but as you all know, lack of evidence is not proof.”*

She makes this statement after admitting she did not consult llama researchers who contested her Risk Assessments after they were published and were being used to support ban initiatives. Instead of

engaging these researchers to get the input she admittedly lacked, she stayed silent and let her RA's create problems for the llama industry and for her credibility. It additionally creates credibility issues for those using the RA's without critical analysis, specifically WSF, WSI, WAFWA.

She lists not one documented disease for llamas so why does she say anything? Instead, she proceeds to advocacy of a standard of zero risk ([precautionary principle](#)) for llamas while simultaneously giving a pass to cattle and horses. The diseases she ascribes to llamas without basis are endemic and prevalent in cattle and horses and virtually non-existent in llamas. M. ovi, that she is concerned about in llamas, has not been proven to not exist in horses and cattle just as in llamas. She seems to consider herself the arbiter of reasonable suspicion and horses and cattle are not subject to the same scrutiny she advocates for llamas. That position is undermined by cattle having been documented with M. ovi in a sheep die off in Colorado in 2007-2008.

It's one thing to have Dr. Schwantje invested in this incongruity, but it's really concerning that it is unchallenged by her veterinary colleagues in WSI-WHC. That stands in stark contrast with the rebukes she has received from leading llama veterinarians/researchers as well as [the American Association of Small Ruminant Practitioners \(AASRP\), representing more than 1000 clinical, research, and regulatory veterinarians.](#)

It defies explanation why Dr. Schwantje did not consult llama researchers as the first step in gathering data for her RA. Now she is trying to distance herself from the compromised results while her work falsely impugns llamas as a disease threat and feeds the call for bans. With Schwantje back pedaling, WSI-WAFWA continues to ignore the opportunity we presented to consult with llama veterinarians/researchers to correct this fundamental error. Without engagement, they insist llama disease data is inadequate and testing is necessary for its expansion. They choose to be willfully ignorant as a strategy to infer llamas are an unknown disease threat.

WAFWA Advocates Testing Llamas without Scientific Consideration of Llama Disease Information

The default advocacy of testing without any regard for existing foundational data is alarming for the llama industry and the general veterinary cohort. Our interactions to this point reveal the condescending "silver bullet" regard for the PCR testing WSI seemingly claims as their domain. This reveals a naivete based in a lack of understanding of the vagaries of testing and/or a lack of concern for the expense, overhead, and potential paralysis testing will needlessly foist on the llama industry.

PCR testing is a tool employed in llama disease diagnosis since the 90's and experience tells us PCR is not a stand-alone diagnostic. Rather it is part of identifying disease affecting an animal population. It requires triangulation with culturing, Elisa or other serology, as well as blood chemistries and physiologies. Dr. Schwantje herself cautions about the inaccuracies regarding false positives and negatives that are a part of sheep testing and the variables that can affect PCR testing in [her podcast](#).

Ep 14 - [The Life and Times of a Wildlife Vet with Dr. Helen Schwantje](#)

In spite of this, WSI, WAFWA-WSF, WAFWA boldly call for testing for an undocumented disease. Where does biologist dominated WSF/WSI/WAFWA have standing to unilaterally make this demand? It's arrogant and ill advised to declare the disease dataset for llamas nonexistent based on a hypothetical risk assessment that admits no information used came from the llama veterinary research community. It would only be reasonable to approach llama researchers collaboratively, knowing they

have a lot of foundational information necessary to even consider potential testing procedures, protocols, and interpretations. The current approach of arbitrary imposition and bullying assures nothing but feelings of disrespect and ill will.

Reading Dr. Kimberly Beckmen's January 2020 presentation to WSWG, [*Mycoplasma Ovipneumoniae- Highlights of Research and Investigative Findings in Alaska*](#), it is striking to note the difficulty that was encountered in testing cervids that are in the same sub-order as sheep and confirmed to carry M. ovi (enzootic). The testing used four different labs. In addition to serology, they used four different PCR tests as well as different primers. They had actively infected animals as well as necropsy specimens to test and confirm positive infections. Yet, in summary, she makes the statement, *"There is a lot more that we don't know than what we do know but we are keeping our minds open to possibilities to see what the data reveals."*

[Biosecurity testing guidelines for Pack Goats](#) demonstrates WSI/WSF uncertainty regarding testing for M. ovi

Testing pack goats for M. ovipneumoniae carriage: Dr. Tom Besser

"Because no laboratory tests are perfect, and because infection and clearance of bacteria such as M. ovipneumoniae are dynamic processes, it will never be possible to achieve 100% confidence that any animal is free of pathogens that pose a risk to bighorn sheep. Nevertheless, we propose an annual negative PCR test result from an accredited laboratory represents adequate documentation of an acceptably reduced risk of carriage of M. ovipneumoniae, provided that a system is in place to ensure accuracy of identification of the animal being tested. To that end, we recommend that pathogen testing samples be collected by an accredited veterinarian, and all animals tested be required to have a permanent ID such as a tattoo, microchip, or official scrapie ID tag present in the ear."

And you're advocating testing llamas with no confirmed active infections with M ovi?

Rest assured this testing will not be a one and done. Follow up testing is assured given the motives of WSF/WSI. With all the M.ovi testing done to date, why is there the overriding WADDL caveat that guarding against exposure post testing and periodic retesting are required. This seems very restrictive and complicated, not the simple process you represent. It appears an invitation to tour the swamp in which goat packing now resides. The reality of abiding by these guidelines leaves one chronically out of compliance or in violation of the protocol.

WSF Dismissal of Llama Research as Expired

That WSI employs WSF member Kevin Hurley's dismissal of Foreyt's '94 pen studies as "inconclusive" because they predate PCR confirmation seems a bit sophomoric. The pen study with actual exposure for several months has more validity than a PCR swab that is uncertified. Your own researchers have identified M. ovi as being present in the Pasteurella spp cultures of sheep with pasteuriosis in the time frame of the pen studies. Dr. Wolff from the 2017 THS Synthesis (THS'17): *"The new molecular technology has cleared up what has been going on the past decades. When pathologists have gone back to old tissues from die-offs many years ago, M. ovi was always present. Interestingly, the same strain that led to the first die-off, was still virulent ten years later. M.ovi is not new."* The same polymicrobial combination would have been present in all the pen studies including those with llamas.

Obviously, llamas did not support or carry those pathogens. The conclusions based on comingling llamas and wild sheep are foundational. To suggest they are outdated is to ignore the fact there has been no identification of *M. ovi* in llamas in the subsequent 30 years. The results of those pen studies 30 years ago are to date, corroborated, not inconclusive.

[A quote from WSWG Working Group email from Mike Cox to Stan Ebel](#), Pack Llama Public Lands Access ad hoc committee, 03/08/2018: *"I believe you are correct in referencing the only 2 studies by Besser and Foreyt that show no impacts to wild sheep when the placed in captivity with llamas. Until such time someone disproves these 2 studies, my scientific discipline and common sense is that llamas do not pose a serious threat to wild sheep with regards to pneumonia."*

In the Brief:

Item A. Issue Summary: Statements 2 and 4 are false. You've made no effort to research or learn about llamas and have chosen to remain willfully ignorant. Llama industry research is thorough and validated. Statement 3 implies you are required to apply any RA that addresses wild sheep. If the RA is hypothetical, based on undocumented disease occurrence or transmission, and based on statistically insufficient occurrence it is incumbent on you to think critically and reject the RA's relevance. That's your job.

Item B. Statements 1 and 4 are true. Statements 2 and 3 are without merit. You resurrected pathogens from the CCH'17 which your original brief described as containing no peer-reviewed data. BVDV still has no prevalence in llamas and is primarily limited to alpacas with low prevalence per camelid research. Those infections originate from exposure to cattle, the vector species for BVDV. PI 3, RSV, *M. Haemolytica*, *Pasturella multocida* were noted as antibody detections that indicate exposure (likely to cattle) and immune response, not infection. Regarding the infections you cite, (PI 3, RSV, *P. multocida* and *M. hemolytica*) were noted in acute pneumonia infections of neonatal alpacas. The fact pneumonias are very rare in llamas and the infections were in neonate alpacas is a strong suggestion of weak, immature, immunosuppressed alpacas, terminally infected.

Item C. All four of your recommendations reflect your lack of research, engagement, and consideration regarding llamas. The arbitrary nature of your suggestions to limit or eliminate llama use or make it conditional is apparent in your failure to apply these recommendations across all domestic species with access to wild sheep ranges. Species such as cattle and horses are allowed, yet llamas exposed to those species as disease carriers would be denied access. Wildly inconsistent, arbitrary, and capricious.

Item D. WSI/WSWG as presently configured is incapable of entering into a meaningful exchange. The wild sheep industry's tactics over the last 30 years have destroyed any sense of trust or willingness within the llama industry to deal with the wild sheep community. The WSF staff and BOD members must be eliminated as members of WSI and not included in policy determinations and recommendations. To answer our edits of the final brief Brewer had to rely on the information we provided which he subsequently distorted, misstated, or minimized to validate his biased position. This wasn't a simple error, but rather it was purposeful. Because WSI/WSF has endeavored to eliminate llamas by building a political coalition that lacks scientific support you cannot reasonably enter into a scientific discussion to support your position. Subsequently, your final brief fails to reconcile with the facts and is detached from scientific reality.

Kevin Hurley is the poster boy and leader for WSF contamination of the WSWG and the transformation of WSWG from science-based management to political manipulation. Please look at the included chronology noting Kevin's tactics as a biased influencer. He freely operates under the protection afforded WSF and WAFWA as scientifically legitimate.

More importantly WAFWA needs to look scientifically at the horses, cattle and humans they reflexively accept in sheep ranges and understand the very real disease and habitat threat they pose to wild sheep as well as other wildlife species. Ignoring this reality undercuts any basis for banning llamas.

WAFWA Fails to Engage Public Lands Access AD Hoc Committee as Agreed

1. Your draft Brief was random, incomplete, and unexamined. In response we wrote a comprehensive chronology and edit of the progression of the llama ban issue to this point. This was the first opportunity we were offered to directly address the sheep community with science and facts. WSF has largely conducted their ban attempts by proxy through agencies using Dr. Schwantjes' hypothetical RA's promulgated by WSF apparatchiks. Our response was an attempt to confront the hypothetical information in the RA's and to highlight the license and innuendo that characterizes their application by WSF and land management agencies. There was a phone discussion regarding WSI/WSWG studying our edits to the brief and giving feedback.

The second brief we received, supposedly from the WAFWA BOD, met none of these conditions and confirmed what we had suspected all along. The information we supplied to Mike Cox and WSWG was not considered. There was never any intention of discussion or consideration of the contrived "camelid Issue" that Dr. Schwantje and the BC/WSF contingent created. The intention was to hold llama interests at arm's length and then overwhelm us with a unilateral fiat to test and enter the WSF's health passport morass that effectively institutes a ban through expensive and repetitive compliance. (Please note the NAPgA passport foisted on the goat packers).

The first brief demonstrates WSI/WSWG failed to recognize the weakness of their position and the unconvincing incongruity of their initial brief as demonstrated by our extensive and substantive corrections. The second response brief was desperately trying to back fill scientific support for the first brief and fails miserably. It's shorter than the first Brief and contains less supporting documentation. They realize they have no knowledge of the progression of their ban efforts and the lack of basis, and the problems they have created through this misguided effort. They are reduced to misquoting or distorting federal and state decisions and positions unfavorable to them or citing partisan unilateral actions that lacked process or scientific examination. The original brief came from Clay Brewer (as evidenced by the brief's origin on his computer), who has been a player in the WSF "No Contact in the North" Thin Horn Sheep initiatives for at least the last 10 years. With or without Clay, the second brief could not find a new path to viable rebuttal and is an embarrassment for the WAFWA BOD this is accredited to.

WAFWA Continues to endorse the Use of Non-specific, Inaccurate Language

2. You ignored our request to focus on llamas as the species at issue in the back country. You continue directing your brief at South American Camelids (SACs) lacking the necessary precision and focus demanded in scientific discussion. Llama vets are adamant there are differences

between llamas and alpacas just as wild sheep vets are specific in reference to sheep and goats though both are caprids.

Further testimony to WSI/WSWG's willingness to be ambiguous and evasive is the sheep community's employment of the fluid and fluctuating reference to "domestic species" using the initials, "DS". It offers a cloaking strategy that is apparent in transcripts and writings that are both ambiguous and deceptive. Initially, in wild sheep discussions, "DS" referenced "domestic sheep" and was a pejorative reference as the source of *M. ovi*. As goats became involved in the *M. ovi* discussion, "DS" referenced "domestic species" understood to mean "sheep and goats". The reference then expanded into an understanding within the sheep community that "DS/domestic species" references sheep, goats, llamas and alpacas, sustaining the pejorative inference as disease threats.

"Domestic species" never includes cattle, horses, mules, donkeys, or yaks, while they clearly qualify as domestic species. At the same time, they represent disease threats much greater than llamas. In your world, "domestic pack animals" is tacitly understood to mean llamas and goats and excludes horses, mules, donkeys and yaks which the veterinary/scientific community would recognize as domestic pack animals as well. These fluctuating caprid acronyms, that eventually mysteriously included llamas, has sadly been used in Federal Environmental Impact Statements (EIS's) for the banning of pack llamas in land management plans. It has also been attributed to a few State Wildlife Big Horn Sheep and Mountain Goat management plans.

Dr. Schwantje in **2017 THS Synthesis**: *"All jurisdictions reported significant progress toward maintaining or achieving effective spatial and/or temporal separation between domestic sheep, domestic goats, alpacas, and llamas collectively referred to as DS (Domestic Species) and THS"*

This ambiguity is especially striking in the Canadian's portrayal of the naivete of thin horns to pathogens of domestic pack animals (sheep, goats, and llamas) requiring separation. Yet, they do not seek to limit the access of domestic equine stock employed by WSF O/G's to support thin horn hunts. The entire projection of thin horn naivete to domestic animal diseases is an assumption that is dependent on bias to wild sheep rhetoric. Thin horns have been demonstrated to carry *M. ovi* in AK in addition to other wild caprids and cervids.
https://www.packllamas.org/pdf/akban/wsf_science_2-final.pdf
<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6256407/>
<https://www.adfg.alaska.gov/index.cfm?adfg=hottopics.movi>

WSI/WSF/WSWG reference llamas as "carriers" of disease, "asymptomatic carriers", and "sub-clinically infected". Noted llama veterinarians observe there are still no endemic diseases in llamas as originally stated in the Canyonlands NP Settlement (SEUG). These references are clearly used as speculation to create the impression these diseases may actively infect llamas and offer a reason why llamas don't present with active disease but are still a disease threat.

WAFWA Dismisses CCH'17, Then revives it for the Second Brief

3. In your initial draft brief, CCH'17 was dismissed as having no peer reviewed data, which is accurate.

Your brief then called for testing llamas to provide a database. We corrected your mischaracterization of the database for llama disease as inadequate and not current. We offered a number of sources for a current archive of disease research and documentation and associated researchers to reference. You failed to acknowledge or reference these resources.

In the second brief, you reverse fields and again rely on CCH'17 as the best available list of llama diseases. It's apparent you need to separate from the CCH'17 as junk science. There is an obvious reluctance to abandon the RA in the absence of an alternative disease list that suits your narrative. The wild sheep community invested time and money in manufacturing the RA as a basis for banning llamas (2017 THS Synthesis) and abandoning it maroons the WSF's [North American Conservation Vision 2020 \(N.A. CV2020\)](#) and several testimonies advocating bans in land management agency policy RODs without scientific basis. That was a bad investment and you now need to find credible science. You cannot do that in the vacuum of wild sheep science. You need to engage the llama veterinarians and researchers that have a background of proven research and knows regarding llama and their diseases.

It's time to face the fact RA'17 is a scientific embarrassment. The contrivance of the RA as exposed in the THS '17 Synthesis is compelling in its detailing of the bias and science ignored. We have referred to this document repeatedly as a roadmap to the current situation and we are confident you've not read it. That needs to happen sooner than later. The WSI/WSF is free to advocate this flawed work as science, but the free market will ultimately have its effect on their scientific credibility as well as those advancing the RA's as valid.

CCH'17 Originated In BC-Commissioned by FLNRORD

4. We emphasize the RA originates in BC. It was commissioned and funded by the British Columbia Ministry of Forests, Lands, Natural Resource Operations, and Rural Development. (FLNRORD). The Alaska Department of Fish and Game (ADF&G) was enlisted as a minor contributor, but distanced themselves from the recommendation to ban llamas when confronted with the questionable science underwriting that recommendation. FLNRORD tasked Dr. Helen Schwantje, a provincial wildlife veterinarian under their employ, to update her RA'03 and RA'05 to shore up the basis for the 2016 legislation cited in your appendix. The final legislation prevents use of pack llamas for hunting support, but not for trekking. This undercuts any validation of llamas as a disease threat. Dr. Schwantje and Bill Jex, a FLNRORD wildlife biologist and WSF member, expressed their disappointment at this in the 2017 THS Synthesis. This capped a series of defeats for their llama ban initiatives in AK citing the RA's '03 and '5 as basis. Both RAs are hypothetical and were dismissed by the various land management agencies because they depend on the assignment of diseases of caprids to llamas. The aforementioned letters from Drs. Fowler, Johnson, and Adams disqualify this strategy based on phylogenetic separation and lack of disease occurrence. These were key dismissals at some agencies in the successful opposition to llama bans at the AK National Park Service (NPS), Bureau of Lander Management (BLM), and US. Forest Service (USFS)

WSF was undeterred in seeking exclusion of llamas from sheep habitat and WSF apparatchiks (notably: Helen Schwantje, Bill Jex, Jim Herriges, Kevin Hurley, Kevin Kehoe, and Clay Brewer) petitioned naïve NGO's to promote and spread the narrative that llamas were a disease threat to wild sheep same as domestic sheep and goats. We now find these individuals woven into the

fabric of WSI/WSWG and agencies while some serving official roles with WSF. They were able to inflict serious damage to the image of llamas and camelids in Canada, specifically in BC to the extent owners were receiving threats in the back country and even in their communities. It occurred to the extent that many owners simply dispersed their herds and llamas as an industry in Canada is effectively extinct. Geographical proximity to BC allowed this narrative to invade AK. BLM units in AK, influenced by WSF member and AK-BLM Eastern Interior employee Jim Herriges as a co-author of the AK-Wildlife Society's [REDUCING DISEASE RISK TO DALL'S SHEEP AND MOUNTAIN GOATS FROM DOMESTIC LIVESTOCK POSITION STATEMENT](#) using citations of the 03 and 05 RA's, have instituted or considered bans and it has had the effect of stifling the AK llama industry. It seeps into U.S. wild sheep management considerations. By any stretch of scientific validity and accuracy related to pack llamas, this paper is an embarrassment to the unqualified authors.

FLNRORD Employes Use Questionable Information for CCH'17

5. FLNRORD personnel are members of the WSWG/WSI and WSF. Dr. Helen Schwantje who crafted this RA as an update to her RA's '03 and '05, is an employee of that ministry as is Bill Jex. Bill Jex is the biologist who provided anecdotal (No, really!) evidence that a single pack llama passing through the Atlin area precipitated a devastating outbreak of Contagious Ecthyma in mountain goats and then spread his story as fact in the BC hunting community. He had no documentation, yet this merited inclusion in the CCH'17. Later at the 2017 THS Synthesis, both Dr Schwantje and Jex admonish sheep managers not to feed mineral to sheep as it concentrates the sheep resulting in spontaneous CE infections since the parapox virus is ubiquitous in BC wildlife populations as documented in Dr. Kimberlee Beckmen's - [Orf virus infection in Alaskan mountain goats, Dall's sheep, muskoxen, caribou and Sitka black-tailed deer \(2018\)](#). CE is rare and atypical in llamas yet Dr. Schwantje continues to reference this yarn as significant.

Dr. Schwantje included Johnes Disease as a threat for llamas to transmit to wild sheep in the CCH'17. She purposely limited the RA's data search for the period of 2007-2017 for BC. In doing so she exposes the fallacy of her projection of the disease dataset for llamas as lacking and not current. She failed to find the DOI's BLM and Canyonlands NP (SEUG) legal Settlement from 1996, that clearly removed llamas from consideration for banning llamas as carriers of Johnes Disease. The settlement also stated that llamas were not considered a threat to carry or transmit other diseases to wildlife. This was the conclusion reached at a BLM workshop conducted March 12, 1996. The workshop provided the backdrop for a thorough review of llama veterinary history to that point and is the foundation we work from. It was concluded llamas had no endemic diseases and no history of transmission of disease to other species domestic or wild. With llamas remaining under close veterinary scrutiny there has been no disease occurrence to change that status.

Dr. Schwantje Fails to Consult Llama Researchers in Writing Her RA's

6. The fact Dr. Schwantje did not use llama vets in the development of the RA is perplexing. There are very few llamas in BC so research and documentation is limited. Why she didn't contact the many llama researchers and teaching programs in the U.S. instead is a valid question. It did serve her narrative that too little is known about llamas and recommends limiting access to wild sheep ranges until more is known. This narrative is carried on today as evidenced by WSI/WSWG's demand for testing to expand the data set for llamas. The existence of a sophisticated network of

international llama vets educated and supported by university veterinary teaching programs shows this projection of deficient data is the result of willful ignorance.

WAFWA Continues to Ignore Statement From The American Association of Small Ruminant Practitioners

7. American Association of Small Ruminant Practitioners (AASRP) the professional association representing that network issued a [policy statement](#) in 2020 listing each of the diseases in the CCH '17 including M. ovi stating there is no reason to ban llamas based on those diseases. It is a direct rebuke of the CCH'17 and they saw the issue as important enough to issue a statement. It's puzzling why the WSI/WAFWA Brief is so bold as to dismiss this rebuke by ignoring it and failing to respond. Biologist dominated WSI/WAFWA still insists the CCH'17 RA is the only current dataset for llama diseases. The 1000+ veterinarians that comprise the AASRP membership deal with llamas on an ongoing basis disagree and find the llama dataset that has been compiled internationally over many years as comprehensive, current, and expanding. Yet WSI /WSWG and their veterinary cohort ignore and fail to respond to its significance.

“There exists concern that the entry of camelid pack animals (llamas, alpacas) onto public lands poses a potential risk of disease to resident endangered or threatened ungulate populations including Boreal Caribou, Northern Mountain Caribou, Central Mountain Caribou, Southern Mountain Caribou, Bighorn Sheep, Mountain Goat, Dall’s Sheep, Stone’s Sheep and Roosevelt Elk. The diseases of concern by National Parks and wildlife managers include: Mycoplasma ovipneumoniae, Mannheimia haemolytica, Mycobacterium avium paratuberculosis, Mycobacterium bovis, Pasteurella spp., contagious ecthyma, bovine viral diarrhea virus (BVDV), and bluetongue virus. Transmission of pathogens from cattle and sheep to wild ungulates under natural conditions has been well documented in the literature. Examples include respiratory disease and fatal pneumonia following contact between domestic and bighorn sheep (Schommer & Woolever, 2008), M. bovis from cattle to elk in Riding Mountain National Park (Garde et al., 2009), and BVDV from cattle to deer (Passler & Walz, 2010). However, there have been no peer-reviewed publications documenting pathogen transmission from camelids to wild ungulates or to domestic sheep and goats for the pathogens of concern. The American Association of Small Ruminant Practitioners is opposed to banning camelid pack animals on public lands until there is scientific justification for this action. Revised February 2020”

International Consortium: 200 Llama Researchers and Vets Hold Continuing Education Summit

8. Llama veterinary information is expanding internationally due to an ever-increasing llama population and broader distribution. In marked contrast to WSI/WSWG they are embracing existing information and expanding it in an effort to apply best management and knowledge of the species. Dr. Cebra from Oregon State University is the lead on this consortium and general llama research and the lead author and editor for the reference book we suggested you read and consult. We mentioned putting you in touch with him on our phone conference and the follow up email. That offer was ignored. We have confirmed he is eager to confer with you and address your concerns and has been a bit perplexed why you don't contact him about the llama dataset and current research. Let us know and we'll get you in contact.

This year, camelid owners around the world will, for the first time, be offered the chance to attend a virtual conference for owners! The theme for this first online Camelid Owners' Conference will be health with disease prevention and diagnosis.

We have the following speakers sharing their knowledge and expertise:

- *Chris Cebra, Oregon State University*
- *Sue Tornquist, Oregon State University*
- *David E Anderson, University of Tennessee*
- *Bob Van Saun, Pennsylvania State University*
- *Julie Dechant, University of California Davis*
- *Karin Mueller, University of Liverpool*
- *Daniela Bedenice, Tufts Cummings School of Veterinary Medicine*
- *Elly Po, Cambridge University*
- *Andy Niehaus, The Ohio State University*
- *Sonja Franz, University of Veterinary Medicine Vienna*
- *Agnes Dadak, University of Veterinary Medicine Vienna*
- *Norm Evans*
- *Joe Smith, University of Tennessee*
- *Caroline Griffin, University of Tennessee*
- *Jane Vaughan, Cria Genesis*
- *Claire E Whitehead, The Alpaca Vet (formerly Camelid Veterinary Services)*

This is a pretty comprehensive list of the world's top veterinary speakers in the field of Camelid Medicine & Surgery. Definitely an opportunity not to be missed and the investment in your learning will be well-worthwhile.

WAFWA Misquotes [Alaska Department of Fish and Game \(ADF&G\) Letter Regarding Llamas](#)

9. The ADF&G Letter excerpt you quote is misquoted. The quote in your brief: *"the Department will continue to focus and enhance **evaluations of disease risk from SACs**"*. The excerpt actually reads: *"we will continue to focus and enhance our evaluation of disease risk from **species other than llamas or related camelids**"*. This is a significant error that we're not convinced was inadvertent. Kevin Hurley has consistently distorted or misrepresented the content and intent of this letter because it definitely distances ADF&G from CCH'17 while he also cites their funding as an indication of support for the RA, which it was not.

BC/WSF really need alliance with ADF&G since they have the same thimhorn populations BC portrays as sacrosanct and vulnerable. AK accepts that M ovi is present in wildlife species including thimhorns and they are monitoring its presence and progression. Llamas are not considered an identified part of the disease threat. AK considered llamas as a disease threat initially and acted cautiously and preemptively. However, presented with additional information and lack of disease problems they have dropped active pursuit of llamas as a disease threat

WAFWA Misrepresents the AK Chugach NF ROD

10. Another gross misrepresentation is your citation of the AK Chugach N.F. Draft Record of Decision to ban the use of llamas. The Final ROD does not ban llamas and cites the reason: *"Also, the FEIS lacked rationale as to why llamas were the only domestic livestock species, aside from sheep and*

goats, which was identified as a potential vector for pathogens to Dall sheep and mountain goats. it would be arbitrary to ban llamas because of disease when the threat of disease from horses is greater.” The draft ROD was contested by the llama industry and testimony was from compelling industry professionals and veterinarians resulting in the final ROD allowing llamas. WSI/WSWG and WSF would be well-advised to note that land management agencies are subject to process scrutiny and inclusion in NEPA-EIS’s and do not want to have policy found “arbitrary and capricious”. This is what we’re admonishing you against in seeking limits to llama access while ignoring the greater and very real threats of cattle, horses, yaks, and humans. This is the very definition of “arbitrary and capricious”.

Agencies use Hypothetical RA’s as Scientific Basis to Limit Llama Access

11. NWT used the Garde RA’05 as documentation. That RA simply took the documented diseases of sheep and goats, recommended banning and then added llamas. There was no scientific documentation offered suggesting llamas as a disease threat to wild sheep. This same stunt is evident in various U.S. and Canadian agency documents that simply cut and paste the same error, then set policy based on it. The RA sets a precedent that green lights erroneous, unsubstantiated information.

The 2003 and 2005 RA’s are the sole references used in the 2013 Herriges-AK-The Wildlife Society paper you cite. [“REDUCING DISEASE RISK TO DALL’S SHEEP AND MOUNTAIN GOATS FROM DOMESTIC LIVESTOCK POSITION STATEMENT”](#)

This paper bears the trademark statement of the hypothetical RA’s as well as two significant scientific misstatements. *“Please note that we have no concerns regarding the use of horses, mules, or dogs as pack animals as there is no evidence that they transmit pathogens to wild sheep or goats”*. Besides repeating the RA’s erroneous conjecture that llamas harbor and transmit the same diseases as domestic caprids, he gives clearance to a number of species as posing no disease threat when in fact these species all exceed the threat he ascribes to llamas.

Using Herriges AK-The Wildlife Society’s (AK-TWS) paper, another letter from then President Jerry Hupp, May 2013, was sent to every Federal Land Management Agency in Alaska.

(Sent to **USFWS**-Arctic National Wildlife Refuge, Kenai National Wildlife Refuge, Kodiak National Wildlife Refuge, Tetlin National Wildlife Refuge. **NPS**-Denali National Park and Preserve, Gates of the Arctic National Park and Preserve, Glacier Bay National Park and Preserve, Lake Clark National Park and Preserve, Katmai National Park and Preserve, Kenai Fjords National Park, Wrangell-St. Elias National Park and Preserve. **USFS**- Chugach National Forest, Tongass National Forest. **BLM**- Anchorage Field Office, Glennallen Field Office, Arctic Field Office, Central Yukon Field Office, Eastern Interior Field Office, Anchorage District Office, Fairbanks Field Office).

This widely distributed letter feeds off the Herriges paper without citations and uses the same conduit to spread misinformation. He repeats Herriges unsupported statement regarding horses: *“Domestic sheep and goats pose the highest risk to Dall’s sheep and mountain goats in Alaska, but other livestock (including cattle and llamas) also carry diseases that can pose a significant risk to wild sheep and goats. Horses are considered low risk .”* The statement regarding llamas is false and is true regarding cattle. The statement for cattle is scientifically supported but lacks

support for llamas. The statement regarding horses cannot be scientifically supported and they do in fact pose a disease threat to wild sheep, greater than llamas and less than cattle.

[AK-The Wildlife Society letter to all AK Federal Agencies-May 2013 Jerry Hupp](#)

The most current example of this strategy is in Alberta, Canada's March 2023 policy that is based on language lifted from your poorly considered posting of the brief we are commenting on. *"Llamas and alpacas can carry agents that potentially cause disease in wildlife, although there is no direct evidence that they have been a source of significant disease in wild sheep or goats. However, current risk assessments are limited by insufficient data. More research is needed before the risks can be fully understood. The Alberta Government encourages actions to minimize potential risk to bighorn sheep from llamas and alpacas: Llamas, alpacas and domestic goats can be used as pack animals on most public lands but are prohibited, or require special permission, in some provincial parks (example: wilderness areas, ecological reserves). A permit is required for all commercial businesses (example: tours, guided hunting) on public lands, but generally not for recreational activities. Near bighorn sheep ranges, the Alberta Government recommends recreation users refrain from using llamas and alpacas."*

This regulation is based on 2 statements that are false. They quote Dr. Helen Schwantje's oft used statement that llamas "can carry pathogens", (still not identified). They incorrectly assume her position is verified. The second false statement based on WAFWA's-WSWG arbitrary and highly contested statement that disease data is insufficient regarding llamas. WAFWA-WSWG exists in willful ignorance about llamas and has made no attempt to study disease in the species. WAFWA-WSWG is libelous in making this judgement and publishing it. They are relying on the WSF manufactured science and prejudice and their position is based on WSF cash, not valid science.

Cattle and Horses

12. The second brief actually acknowledges for the first time that other nonnative domestic species (horses, and yaks/cattle) may present a disease risk, but the focus is on llamas. This is arbitrary and a non-starter for the llama industry. Those species carry endemic diseases that can be communicated to wild sheep. Llamas have no endemic diseases. Your order of testing defies logic which is not unusual.

Dr. Maggie Highland addresses this issue answering the same question regarding cattle/yaks:

[Bighorn Domestic Sheep Working Group \(BHDSWG\)](#)

Science Symposium – June 10, 2019

Post-Meeting Q&A Sent Via Email to Speakers

Question: Over the last 25 years, some members of the wild sheep community have repeatedly included llamas with sheep and goats for separation from wild sheep. This happens in spite of the fact that llamas have undergone pen studies with wild sheep that show them not to carry M. ovi and other pathogens associated with polymicrobial pneumonia, the major cause of mortality in wild sheep populations. Llamas have no endemic diseases and as Tylopoda/camelids have a wide taxonomic separation from Ruminantia/bovids, including sheep, goats, & cattle. Yet the diseases endemic to these bovid species are cited as reason to consider separating llamas from wild sheep despite no documented

occurrence in llamas. At the same time cattle are not recommended for separation and are even considered as replacement species for domestic sheep and goats. Can you explain this reasoning?

“This would be better addressed to someone who believes cattle are OK among bighorn sheep and llamas are not. Perhaps someone from the WSF can explain this, since I believe they are one entity that push the idea that sheep and goats should go and cattle can be in bighorn habitat. Percentage-based data that is published reveals that a higher percentage of bighorn sheep die when forced to co-mingle in captivity with cattle than the percentage that have died from being co-mingled with goats (even though there are more bighorn-goat co-mingling studies that have been performed than bighorn-cattle commingling studies).”

A paper regarding a southern CO “die off” in Bighorn Sheep sympatric with cattle testing positive for M. ovi confirms cattle are capable of carrying and transmitting M.ovi to wild sheep. Why does WAFWA not place the same testing demands on the cattle industry they are currently placing on the llama industry for which there is no evidence of M.ovi infection. (*Cattle in Colorado (2007-2008) Wolfe LL, Diamond B, Spraker TR, Sirochman MA, Walsh DP, Machin CM, et al. A bighorn sheep die-off in southern Colorado involving a Pasteurellaceae strain that may have originated from syntopic cattle. J Wildl Dis 2010;46:1262.*)

WSF Participation on WAFWA/WSWG is Wrong

13. Participation of WSF officers and members on WSI is inappropriate and clearly encourages bias against llamas within the wildlife and land management agencies. The current structure of WSI/WSWG/WSF explains the errors and inaccuracy that characterize your briefs. We’ve noted ever since we started interacting with WSWG that WSF members on the committee or given privileged access, provide full time representation for WSF. It is also apparent the only disease or scientific information they offer is that favoring WSF positions to guide WSWG under the illusion their positions favor best management of wild sheep. The WSF members often have no state agency responsibilities and accordingly fill the role of utility errand boys doing research and writing assignments full time that agency biologists are too busy to fulfill.

Does this explain why Clay Brewer was tasked with writing the original and final briefs? How is it proper for a WSF conservation officer, who has openly voiced opposition to llamas in wild sheep habitat, to write a position paper regarding llamas for public wildlife management agencies. Clay Brewer, Kevin Hurley, Jim Herriges, Bill Jex, and Dr. Schwantje are on record making or writing public statements and addressing NGO’s with their positions regarding disease threats from domestic sheep and goats and state or infer llamas are disease threats as well? They have provided commentary on land management agency wildlife management policies and influenced those decisions citing the RA’s that contain no llama disease documentation.

WAFWA/WSF “quid pro quo”

14. The llama industry has a problem with the “quid pro quo” that exists between the WSF and WAFWA’s wildlife agencies. State agencies are taking a public asset, wild sheep, and the limited hunt tags issued for legal sheep hunts and providing a special tag(s) from each state available to WSF for auction. WSF’s moneyed, aristocrat hunters want to cut the considerable line waiting to

be drawn for a tag. They pay exorbitant prices for these special tags that give them publicity, a sizeable tax deduction, and immediate access to a turnkey sheep hunt. Proceeds from the tag auctions ostensibly are used for sheep research and habitat improvement. This is a win/win for WSF and WAFWA. The immediate loser is the public hunter who after waiting years for a tag, gets pushed out of consideration as the high bidder moves to the front of the line.

The long-term loser is the public land user whose access is exposed to potential limitation by WSF's improper access to WAFWA/WSWG policy makers that give preference to WSF priorities. WAFWA's current push to limit llama access to the millions of acres of public land that qualify as sheep habitat does and will affect many llama users who use these lands for recreational access to camp, view wildlife, and photograph (especially for families and special needs individuals with diminished capacity). Others depend on llamas to support fishing, climbing, trail maintenance, and hunting species other than wild sheep. The amount of sheep hunting supported by llamas is miniscule compared to these other applications. WSF is purchasing priority access over these other user groups to limit disruption to the wild sheep population that they routinely disrupt through hunting and their extensive off-season testing. Limiting access is discriminatory against these users and an unfair trade practice against the llama industry.

WAFWA needs to provide an audit of tags auctioned, money raised through these auctions, and identify distribution of these funds to member agencies. WSF charges a commission of 7% for conducting the auctions. Many of WSF's activities involve sheep activism and lobbying that take sizeable amounts of money, yet they project a public image of supporting sheep research and habitat improvement. Analysis of tax returns indicates more goes to promotion, lobbying, and image building than habitat and research. WAFWA members need to look at using their general online licensing capability to conduct their own online special tag auctions and separate from WSF involvement in tag auctions. Properly presented, these auctions would generate the same revenue, eliminate the WSF's 7% commission, and eliminate fund allocation shrink and diversion. It would ensure fiduciary oversight and eliminate the improper involvement of the special interests of WSF. The public, especially the hunting public, is taking exception to the influence of corporate and commercial interests using public assets at the expense of the public that owns them. There is a great deal of controversy over the special treatment outfitter/guides are considered to receive. The territoriality with which O/G's engage private citizens is disturbing to those rightfully using public lands.

Habitat Improvement

15. Habitat improvement is a stated strategy for increasing wild sheep populations and their health. We see this as the most effective strategy and a higher priority than a continued focus on stagnant disease management centered on test and remove. Habitat improvement is a strategy that benefits the entire public and all wildlife and the lands they occupy. To have WSF focus on habitat with their abundant funds removes the quid pro quo aspects inherent with funding research and manipulation of the sheep population through funding agency biologists and personnel?

There is a remarkable inconsistency in the WAFWA/WSI/WSF currently trying to limit or eliminate llamas from sheep ranges in favor of the equine supported WSF hunts. Llamas have less than 10% the impact on mountain landscapes regarding all impacts. Feed consumption (natural browse and supplemental), erosion, fecal matter, disease threat, and stress on wildlife are

significantly reduced with llama supported camps and hunts. Llamas carry half and eat a tenth compared to horses. Llamas are averse to contact with wild sheep and goats. They become alarmed when sheep or goats, domestic or wild, come close to camps. Llama packers learn to avoid camps in areas frequented by sheep or goats. Llamas tend to pull their pickets on approach by these species and flee. They don't stay around to sniff them.

If a single sheep hunter used llamas, 2 pack llamas could adequately support their hunt. Compare this llama hunt to the hunts we see featured on the WSF website guiding a single hunter. Three or four support personnel, as many as 10 horses, and the resulting camp footprint create remarkably higher impacts. These high impact camps and their horses consume excessive vegetation and trample a large footprint that will recover slowly and limit the wildlife it would otherwise feed. Significantly higher human and horse waste create pollution and disease reservoirs that destroy aesthetics and attract varmints and insects. Conservation-minded hunters, agency trail crews, and all manner of back country users understand the llama's reduced trail impact and quiet demeanor offer significant advantages. These are the reasons they use llamas. They just make sense.

If WAFWA-WSI continues to pursue limiting llama access while promoting the problems created by WSF O/G's profligate hunts, you can expect significant and well-reasoned opposition from these users. They take exception to WSI/WSF working to limit their access while squelching opportunity to significantly reduce impacts. They seek to improve the prospects of wild sheep and other wildlife while you contribute to the deterioration and capacity of their habitat to increase your profits. Llama users question why WSI doesn't promote the use of llamas to the benefit of the sheep they purport to encourage and protect. They do not understand the WSF's O/G's logic of continuing to use horses given the increased environmental degradation, higher maintenance overhead, and higher disease risk.

WSI Induced Stress On Wild Sheep

16. As livestock managers we are struck by the obvious stress that is inherent in your strategy to employ domestic animal management strategies requiring restraint of free-roaming wild sheep. Net gunning, drop netting, darting, wrestling/dogging, swabbing, sedating, slinging, transporting, and transplanting strike us as highly stressful to a naturally free roaming, wild species. We would not be inclined to use those techniques on our domestic animals, yet it appears your routine management requires some combination of these practices.

These are invasive operations supported by helicopters that produce herd-wide panic prior to employing the actual capture and handling. The support base camps for these operations are high impact on the sheep herd and leave a lasting impact and a potential disease repository in their habitat. Numbers of personnel required, support field facilities (tables, shelters, generators, sanitary stations, camp kitchens, etc), support vehicles and trailers all offer sources of significant stress. Heat-stress and subsequent myopathy, sensitivity/intolerance of sedatives, and anaphylaxis inherent with this type of capture have to produce incidental mortality. At what levels do these incidents occur? How do you know? Are these populations under close observation once they are released?

These rodeos serve as subject matter for the considerable video documentation that is an increasing part of WSF/WSI public relations. There is a considerable amount of time and money directed at rationalizing the questionable practices that have become standard in sheep management. In fairness to the sheep, it seems there needs to be accountability for the fact nothing changes regarding sheep disease. It looks like “test and remove” ad infinitum is their destiny.

The disease transference and inoculation facilitated by this backdrop of stress is a factor we consider significant. Physical handling of sheep by their horns exposes them to the possibility of infection by parapox virus or other contact infections. Fomite infection seems a high probability given the absence of a sterile, controlled environment and involvement of multiple personnel. Respiratory transfer of pathogens is enhanced by accelerated breathing of both the sheep and human handlers. The close comingling of captured sheep escalates the probability of pathogen transfer between sheep as they physically touch and transfer excretions and exudates.

There needs to be accountability for these impacts and their mitigation. There also needs to be an analysis of the net effect on the wild sheep population. PCR testing is relatively effective in identifying infected animals. Its main advantage is fast results. However, there are always false positives and false negatives to be dealt with. How many false negatives are turned back into the herd and how many false positives are unnecessarily killed? How do you even know? The expedience of PCR seems to have generated a comfort level that allows WAFWA to rest on the plateau of “test and remove”. There needs to be a next step soon.

Llamas Encourage a Healthier Sheep Population.

Wild sheep are an iconic animal in the North American wilderness. They are one of a number of wildlife populations in western North America that provide and require a harvest for maintaining healthy populations. Wild sheep are magnificent, uniquely adapted occupants of the highest vertical rock formations the Rocky Mountain region offers. Hunting them is considered an ultimate hunt because the numbers are limited and the hunting environment physically demanding. Protecting this species as well as other species is important. But it's important the protection of one species is not at the expense of others.

The WSF's efforts to separate domestic sheep and wild sheep appears scientifically warranted and has probably increased wild sheep populations. Possibly the same can be said for the separation from domestic pack goats, though the disease evidence is less compelling and the probability of exposure significantly less. Clearly the momentum WSF developed in these efforts has carried them over the line trying to extend this separation to include llamas. Their hand wringing and finger pointing is theatrical and not science-based. No evidence of disease and improbable contact expose their agenda of controlling sheep habitat and exclusive consideration for WSF sheep hunters. It does nothing to improve the health of wild sheep.

Guided WSF hunts using horses are higher impact than hunters using llamas. Horses have been used for years without serious impacts on sheep, so why restrict llamas to access sheep ranges, since they have lower disease potential and environmental impact? Reduced impact is favorable to other species like elk and deer. Hunters seeking these species are increasingly depending on llamas to service hunt camps and haul out meat. The llamas encourage dispersed hunting and

limit impacts. This is a much more effective management strategy for all species that encourages widely dispersed populations of healthy animals in a healthy environment.

If WSF/WSI want to ignore these facts and invoke precautionary principle for llamas, they need to do the same for horses and cattle or possibly stop sheep hunting altogether. Lead implants are decidedly the most lethal threat to wild sheep we've noted in our analysis and WSF is prominent in their advocacy of this practice.

Sincerely,

Ad-Hoc Committee for Llama Access to Public Lands

Stan Ebel, CO

Scott Woodruff, WY