

October 14th, 2019

USDA Forest Service
Attn: Jeff E Schramm, Forest Supervisor
Chugach National Forest
1661 E. Ave, Door 8
Anchorage, AK 99501

USDA Forest Service
Attn: Dave Schmid, Objection Reviewing Officer
Alaska Region
709 W. 9th St.
P.O. Box 21628
Juneau, AK 99801

RE: Pack Llama Prohibition/Restriction – Chugach National Forest Land Management Plan (CNFLMP)

Dear Mr. Schramm and Mr. Schmid:

Thank you for the opportunity to write this formal objection letter to you concerning the current CNFLMP document no. R-10-MB-828c published August 28th, 2019 by the Chugach National Forest (CNF). I am very concerned about the issuance of a final CNFLMP containing prohibitions and restrictions on the use of “lamas” as a pack animal on our national forest lands, presumably based upon a disease threat to wild sheep.

I have 35 years of professional and personal pack llama use, serving the public on our public lands. I operate under Special Use Permits and Special Recreational Permits on the USDA-USFS and DOI-BLM. Over the years, I have served on various wilderness committees on the Shoshone National Forest (SNF). I have also worked with USFS-Region 4 wilderness staff on issues of wilderness and public land use of pack llamas. I have served 6 years as an elected BOD for the International Llama Association in the 1990's. I co-authored “The Impacts of Llamas as Hiking Companions”; a brochure distributed by many agencies and non-profits alike. In 1994 our commercial llama trekking company was awarded the Outfitter of The Year by the SNF, our nation's first national forest. I understand recreational use, and the complexities of forest management for all users. Please allow me the constructive opportunity to offer the following information.

It appears the CNFLMP has made a fundamental mistake through their Draft Environmental Impact Statement (DEIS) process cumulating into a Final Environmental Impact Statement (FEIS) and CNFLMP. The 2018 DEIS does not propose any prohibition and/or restriction on the use of “lamas”, pack llamas, or llamas. In fact, it does not mention the “lamas” at all in the DEIS. Therefore, the general public was not allowed to make comments on any restriction or prohibition on “lamas”, because it was not identified as a specific issue or concern. This letter, and many others, should be considered new information for the CNFLMP process before a Final Record of Decision (ROD) is made.

I'm not sure if this was an inadvertent or purposeful exclusion of “lamas” in the DEIS, but somehow it mysteriously appeared in the FEIS for the CNFLMP. I also have personal knowledge of an Alaska resident, who uses pack llamas for recreation and hunting, who was in close communications with CNF-Wildlife Program Manager Bret Christensen in 2017, 2018, 2019. There were no concerns relayed from Bret on

the issue of pack llamas to be prohibited, in fact quite the opposite. Our industry was not afforded the opportunity to comment or help on this issue.

More specifically: In the CNFLMP – FEIS – Volume 2 (page 157), **Ecological Sustainability – Wildlife**, a CNF Response Comment to **“Concern Statement 44: The Forest Service should not regulate livestock on private lands,The standard prohibiting domestic goats, sheep, and lamas applies only to National Forest System lands within the Chugach National Forest as stated in the original language (draft land management plan page 69, #14)....”**

This CNF response comment is not correct. The CNF-DLMP, page 69, #14 under **Mountain Goat and Dall Sheep Habitat Management**, *“Domestic goats and sheep are prohibited on NFS lands within the Chugach National Forest. [Standard]”, does not* include the genus name lamas. Lamas mysteriously only showed up in the FEIS and CNFLMP. There must have been discussion on this inclusion of the prohibition of lamas with some internal CNF staff, but apparently not with the public, especially the “lama” industry which specifically includes the use of the historical pack llama on federal lands all across this county, which includes wild sheep habitat. This would include, but not limited to, hunters, summer recreationalists, contract maintenance crews, wildlife biologists, disabled citizens, and permitted outfitters and non-profit institutions that were not afforded participation in the discussion process for the continued use of this low impact and historical pack animal on the CNF. It concerns me that this user group was not considered in the DEIS, then later in the FEIS, subliminally entered in “lamas”, as if they are synonymous with domestic sheep and goats.

A prohibition of pack llamas used on our public lands based upon the false science of pathogen transmission to wildlife, or worse, special interests desires, can set precedence. I hope the CNF does not become the first national forest jurisdiction to do this.

With this in mind: The term “lamas”, which is used 3 times in the CNF-FEIS (pg. 157, and pg. 158), and 1 time in the CNFLMP (pg. 55) would reference the Lama genus of the South American Camelid Family. This would include two wild types, the Guanaco and the Vicuna, and two domestic types, the Alpaca and the Llama. If the CNF is referring to the pack llama, which is domestic (like horses, sheep, and goats), then the proper terminology would be “llama” or “pack llama” or “Lama glama”, like the “pack horse” or “Equus caballus”, both domesticated. Somehow the pack llama was arbitrarily added alongside the list of domestic Caprinae of the Bovidae family members of the Ruminatia sub-order (ruminates).

Domestic llamas are in the Lama genus of the Camelidae family, member of the Tylopoda sub-order, and are not in the Ruminatia sub-order, like all Bovidae and Cervidae family of animals. Llamas are not ruminates. Somehow domestic horses were not arbitrarily added to this disease threat list? They too, are not in the Ruminatia sub-order, which also appears to be arbitrarily excluded as a threat to wild sheep.

Why is this important? It’s important because the wider phylogentic separation of llamas from the Caprinae (goats and sheep) lessens the likelihood of them carrying or transferring pathogens that may cause disease in wild sheep and goats. This is very similar to the horse. Because of the llamas’ diverged evolutionary paths from the Bovidae family, strong species barriers exist, making llamas extremely unlikely to transmit pathogens that cause disease in wild sheep, as compared to goats and sheep (see attached letter from the late Dr, Murray Fowler, a recognized camelid expert, to the ADF&G dated April 9th, 2012). There are no endemic pathogens acquired or carried in the llama that are a threat of transfer

to wild sheep and goats, causing disease. The risk of pathogen-transfer from pack llamas is no more a threat than horses or humans are to wild sheep and goats, and probably less, which is infinitesimally small. There is no such thing as a zero risk, and principles need to be applied equally, not arbitrarily.

One frustrating use of terminology frequently applied in land management plans and even research studies and papers, is the vague use of the words “domestic livestock”, “domestics”, “domestic species” or worse “DS”, which could mean “domestic sheep” or “domestic species”, while seemingly consistently referencing “domestic sheep and goats” in the research, but then leave it open to an interpretation without specific identification to include or exclude domestic pack animals like llamas, horses or mules in the rest of the discussions.

The CNFFEIS and CNFLMP takes it a vague and factually incorrect step further using the sentence, “*The use of domestic goats or other hooved pack mammals as pack animals increases exposure risk*”. This is referenced 3 times in the CNF-FEIS Volume 1, pages 413, 439, and 442, and 1 time in the CNFLMP on page 385 under Dall Sheep (*Ovis dalli*), page 386. The CNF-FEIS and CNFLMP then proceeds to falsely cite (Schommer and Woolever 2008)

Nowhere, in the “Schommer, T.J.; Woolever, M.M. 2008. A review of disease related conflicts between domestic sheep and goats and bighorn sheep. Gen. Tech. Rep. RMRS-GTR-209” summary document does it use the sentence, “*The use of domestic goats or other hooved pack mammals as pack animals increases exposure risk*” (I’m not sure where this sentence is extracted from in this document and shows no correlation). However, the research summary of Schommer and Woolever 2008 does exonerate llamas on two levels. **One**, on page 4, under “Planned Pen Experiments With Other Species: Foreyt (1992a, 1994) and Foreyt and Lagerquist (1996) conducted extensive pen studies including llamas and bighorn sheep and concluded: “*These findings suggest that the presence of other species in pens itself is unlikely to lead to bighorn sheep deaths and that species other than domestic sheep are considerably less likely to transmit microbes fatal to bighorn sheep. This latter conclusion is consistent with a lack of historical observations or circumstantial data linking such species to bighorn sheep die-offs.*” And **two**, on page 7, “Microbial Transmissibility: “*All ungulates, except llamas, carry some strains of Mannheimia haemolytica (Foreyt 1995). Bighorn sheep appear to be behaviorally attracted to domestic sheep and goats, but not to cattle or llamas. Since Mannheimia spp. and Pasteurella spp. bacteria transmission requires very close (less than 60 ft) contact or transfer of mucus through coughing or sneezing, it is more likely to occur between bighorn sheep and domestic sheep or goats (Dixon and others 2002) that are behaviorally attracted to one another.*”

After 35 years operating in wild sheep country with pack llamas, and by observation, I can concur that pack llamas want nothing to do with wild sheep and goats, and visa versa. Llamas will alarm call almost anytime they see wild sheep and goats from a distance and want nothing to do with them and try to separate themselves. They are not behaviorally attracted to one another.

In 2016, there was a contempt of court ruling against the Shoshone National Forest (SNF). The 2012 Shoshone RADT [Risk of Disease Transmission] Report paralleled too much of the 2006 Payette Principles Committee information, which a previous court ruling in 2009 found not to be used for future forest management decisions. Schommer, T.J.; Woolever, M.M. 2008. A review of disease related conflicts between domestic sheep and goats and bighorn sheep. Gen. Tech. Rep. RMRS-GTR-209 included the summary of the published scientific literature concerning the issue of pathogen transmission between bighorn sheep and domestic sheep and goats. It references the Payette Principles

Committee for management of domestic sheep and goats, and was not to be used in their Final EIS with the 2012 Shoshone RADT because a judge previously ordered, in 2009, the 2006 Payette Principles Committee finding and /or conclusions are not to be relied upon by the Forest Service with respect to any future agency decisions (attached: Judge Winmill Memorandum Decision and Order.pdf). The USDA-Forest Service has subsequently retracted the RMRS-GTR-209 document, but also mentioned the court order does not preclude the underlying scientific literature reviewed by the Payette Principles Committee nor the scientific literature referenced in the GTR.

With that said, the summary's references to llamas and the existing research of "Foreyt, William J. 1994. *Effects of controlled contact exposure between healthy bighorn sheep and Llamas, domestic goats, mountain goats, cattle, domestic sheep, or mouflon sheep. Northern Wild Sheep and Goat Council Proceedings 9:7-14.*", is also included in the summary study of "**A Process for Finding Management Solutions to the Incompatibility Between Domestic and Bighorn Sheep**" (Schommer and Woolever 2001) (attached).

Another example of a misleading and vague definition of CNF's usage of "domestic livestock" is on pages 158 and 159 of the CNFLMP: FEIS-Volume 2. "Concern Statement 48: The Forest Service should prohibit domestic sheep and goats on National Forest System lands"

Sample comment: (extracted from public comments of the Wild Sheep Foundation) *Published, peer-reviewed scientific literature to date clearly indicates adverse impacts to wild sheep from respiratory pathogens commonly carried and transmitted from domestic sheep and goats to wild sheep and mountain goats. WSF believes the significant body of peer-reviewed, published scientific literature, along with internal direction from the USFS Washington Office, provides sufficient basis and justification for the CNF to implement this strategy (as a Forest Plan Standard) in the CNF Plan Revision.*

Sample comment: (extracted from public comments of the Alaska Wild Sheep Foundation) *We fully support the intent behind this prohibition, to ensure Mountain goats and Dall sheep do not come in contact with domestic sheep or goats that carry devastating pathogens such as Mycoplasma ovipneumoniae (M.ovi). It is imperative that pathogens such as M.ovi not be transferred from domestic sheep or goats to wild sheep or goats in the Chugach National Forest. In the absence of any State Regulations requiring domestic sheep and goats to be tested and certified as M.ovi Free the only responsible approach is to prohibit domestic Caprinae (sheep, goats, muskoxen) from entering the Chugach National Forest.*

Response: *We understand you support our efforts to avoid disease transfer between "domestic livestock" and native mountain goats and Dall sheep.*

Nowhere in these comments, from the Wild Sheep Foundation or the Alaska Wild Sheep Foundation does it reference the vague term "domestic livestock". They clearly, specifically single out domestic sheep and goats, and domestic Caprinae (sheep, goats, muskoxen) in reference to the page 69 CNFDLMP "**Mountain Goat and Dall Sheep Habitat Management. #14 Domestic goats and sheep are prohibited on NFS lands within the Chugach National Forest [Standard].**" There is no reference to the domestic llama or "domestic livestock". Therefore, the CNF needs to be specific in its FEIS response to Concern Statement 48 on page 158 which were submitted in response to the draft EIS, which did not include any reference to llamas nor vague reference to "domestic livestock" which also could include many species like horses and cattle.

The CNFLMP appears to be incorporating a forest standard to prohibit pack llamas, based upon a disease threat to wild sheep and goats. To the best of my knowledge, there are no other USFS jurisdictions that have incorporated any prohibition of pack llamas based upon a theory of disease threat to any wildlife. This decision, should it become guidance and policy, would be inconsistent with numerous USFS jurisdictions and state wildlife agencies.

- 1) The CNFLMP is at odds with the position of the Alaska Department of Fish and Game (ADF&G) on the use of pack llamas on public lands, agreeing there is not a threat from these pack animals to the very wildlife they are charged with managing. Per the letter from ADF&G dated June 11, 2018 (attached), the Department's position is *"at this time we have no intention to promote or support limiting the use of South American camelids on public land in the State of Alaska"*. This decision was made by ADF&G despite the fact that they supported and helped pay for a camelid disease study (RA) report. The ADF&G letter states *"there is no significant information in the RA. After discussing the document internally and with other biologists from several jurisdictions (including the Western Association of Fish and Wildlife Agency Wild Sheep Work Group - WSWG), we will continue to focus and enhance our evaluation of disease risk from species other than llamas or related camelids. There is not enough information presented in this report or other current publications to warrant spending additional resources on this issue."* Furthermore, the ADF&G letter states *"we understand that the WSWG pulled the RA report from their website partially due to some concerns about the report itself."*
- 2) The Western Association of Fish and Wildlife Agencies (WAFWA) positions are foundational to ADF&G's stated policy. WAFWA is widely recognized among state and federal wildlife agencies as the scientific reference for wildlife disease issues. The CNFLMP position on "llamas" is in direct conflict with wildlife disease management recommendations of WAFWA-WSWG wildlife researchers and veterinary authorities.

With the above WAFWA-WSWG in mind, the CNF EIS process from start to finish repeatedly cited (Jex et al. 2016), (WAFWA 2012), (WAFWA 2017), (Schommer and Woolever 2008), and (TWS-AAWV 2015). They were cited with references to domestic livestock, domestic sheep and goats, domestics, and hooved pack mammals (see comments on hooved pack mammals- Schommer and Woolever 2008 – on page 3 above). Lamas and llamas are not a part of any discussion in the DEIS process. None of the above citations implicate llamas as a disease threat to sheep and goats, but quite the contrary. The CNF citing of (Jex et al.2016) does include the conversation, indirectly, by taxonomic order and species. Lamas are clearly mentioned as a non-threat to wild sheep by the definition of spatial and temporal separation. The CNF cites and uses this research to justify the "spatial and temporal" separation and prohibition of domestic sheep and goats, while ignoring the same research with reference to llamas as not a threat. Specifically, (Jex et al. 2016) defines "spatial and temporal" as *"Effective separation is defined as spatial or temporal separation between thinhorn sheep and domestic sheep or goats. Reducing the potential for association between those taxa (emphasis added) and the likelihood of transmission of pathogenic organisms or parasites between species is critically important"*. It specifically uses the taxonomical identity of domestic Caprinae and thinhorn sheep.

All of the other WAFWA-WSWG research and other cited research material in this CNFFEIS and plan do not implicate llamas. The WAFWA-WSWG started in 2007 with development and

evolution of their management recommendations for wild sheep through 2017. These recommendations have evolved this way, over a decade, because pack llamas are not a threat, and they have been discussed in numerous WSWG meetings over the years, including in the winter of 2019.

- 3) The Whiskey Mountain Bighorn Sheep Herd is on the Shoshone National Forest. In July 2019, the Wyoming Game and Fish Department released the Whiskey Mountain Bighorn Sheep Plan. This plan was developed with an in-depth, multi-agency, multi citizen, participation cooperative. *“Experiments have been conducted to evaluate the potential for respiratory pathogen transference from elk, white-tailed deer, mule deer, horses, llamas, and cattle. There was little indication that any of these animals posed a risk to bighorn sheep (Schommer and Woolever 2008, Besser et, al. 2012a, and Besser et. al. 2012b)”*
- 4) In the CNFLMP, pg 386, it states: *“Dall Sheep and mountain goats in Alaska have not been exposed to many of the pathogens commonly carried by domestic sheep (Garde et al. 2005; Miller et al. 2008), but evidence suggests they are as sensitive as bighorn sheep to some respiratory pathogens (Jex et al. 2016). Careful management to maintain separation of Dall sheep and mountain goats from domestic livestock is key to maintaining this condition.” A)* Recent evidence in 2018 by the Alaska Department of Fish and Game shows Dall sheep and other wild Caprinae and Cervidae in the state of Alaska have in fact been exposed to respiratory pathogens, including M. ovi strains. This CNFLMP statement is probably outdated. Respiratory pathogens are very likely present in wild populations of ungulate mammals in Alaska. *B)* (Jex et al. 2016), as mentioned previously, defines spatial and temporal separation as *“Effective separation is defined as spatial or temporal separation between thimhorn sheep and domestic sheep or goats. Reducing the potential for association between those taxa (emphasis added) and the likelihood of transmission of pathogenic organisms or parasites between species is critically important”*. It does not include the lama, and the CNF has used the word “domestic livestock” out of context in this cited research to arbitrarily include the lama prohibition in the CNFLMP.

In summary, the CNFLMP is suggesting the prohibition of pack llamas as a standard tool to apply towards the banning of this historically used pack animal in the US on our public lands. It sets precedence for the USFS. It is based upon no peer reviewed scientific research that includes the lama, and then proceeds to falsely use other research implicating domestic sheep and goats, to arbitrarily tag the lama along with domestic sheep and goats. It creates undue harm to owners and users of pack llamas, which include a wide array of established recreational activities on public land. It creates a false narrative that llamas are disease ridden animals and a threat to wildlife. The CNFFEIS did not allow the pack llama user group, or lama husbandry industry as a whole, to participate in the process, because it was never identified as an issue in the beginning. The prohibition of llamas for recreational packing on the Chugach National Forest (CNF) is arbitrary and capricious.

I request that the CNF do not identify llamas (pack llamas) as a disease threat to wild sheep or other wildlife as referenced in the CNFFEIS (V1 and V2) and the CNFLMP. Please take llamas off of the CNFLMP pg 55: ***“Wildlife Management (WL) Mountain Goats and Dall Sheep (Goat), #2 Personnel conducting Forest Service management actions or authorized activities (employees, contractors, cooperators, and special use permit holders) shall not use or keep domestic goats, sheep, or llamas on National Forest System lands within the Chugach National Forest. [Standard].”*** Please take llamas off of the CNFFEIS (v1) pg. 13: ***“Terrestrial Wildlife and Habitats: Updates to text were made for clarification purposes in response to comments. The Threats to Abundance, Distribution, or Persistence section was updated.***

The text on domestic goats, sheep, or **lamas** was updated.” And repetitively, **lamas** once mentioned on pg 440 and once on pg 442. Please take lamas off the CNFFEIS (v2) pg. 157 under “***Ecological Sustainability – Wildlife***” under the CNF comment response... “***The standard prohibiting domestic goats, sheep, and **lamas** applies only to National Forest System lands within the Chugach National Forest as stated in the original language (draft land management plan page 69, #14)***”, and repetitively, **lamas** mentioned twice under CNF comment response on pg 158.

By this letter I am providing formal notice of objection to the Chugach National Forest Land Management Plan during the 60 day objection period as defined under (36 CFR 219.52(c)(5)).

Thank you for your time, and efforts to manage our forest lands and recreation. Should you have any questions, feel free to make contact.

Sincerely,



Scott Woodruff

Lander, Wyoming

e-mail: scott@wyominghiking.com

Enclosures/attachments:

*ADF&G June 11, 2018 letter to GALA

*Dr. Murray Fowler April 9, 2012 letter to ADF&G

*Judge Winmill Memorandum Decision And Order (2016)

*A Process for Finding Management Solutions to the Incompatibility Between Domestic and Bighorn Sheep (Schommer and Woolever 2001)