

**BEFORE THE UNITED STATES DEPARTMENT OF AGRICULTURE,  
FOREST SERVICE DATA QUALITY OFFICIAL**

COLORADO WOOL GROWERS ASSOC., )  
AMERICAN SHEEP INDUSTRY ASSOC., )  
ARIZONA CATTLE GROWERS' ASSOC., )  
ARIZONA WOOL PRODUCERS ASSOC., )  
CALIFORNIA CATTLEMEN'S ASSOC., )  
CALIFORNIA WOOL GROWERS ASSOC., )  
COLORADO CATTLEMEN'S ASSOC., )  
COLORADO FARM BUREAU, )  
COLORADO PUBLIC LANDS COUNCIL, )  
F.I.M. CORPORATION,  
IDAHO FARM BUREAU FEDERATION,  
IDAHO WOOL GROWERS ASSOC.,  
IDAHO CATTLE ASSOC.,  
MONTANA ASS'N OF ST. GRAZING DIST'S,  
MONTANA PUBLIC LANDS COUNCIL,  
MONTANA STOCKGROWERS ASSOC.,  
MONTANA FARM BUREAU FED.,  
MONTANA WOOL GROWERS ASSOC.,  
NATIONAL CATTLEMEN'S BEEF ASSOC.,  
NEVADA FARM BUREAU FED.,  
NEVADA WOOL GROWERS ASSOC.,  
NEW MEXICO FEDERAL LANDS COUNCIL,  
NEW MEXICO CATTLE GROWERS ASSOC.,  
NEW MEXICO WOOLGROWERS ASSOC.,  
NORTH DAKOTA LAMB & WOOL PROD. ASSOC.,  
OREGON SHEEP GROWERS ASSOC.,  
PUBLIC LANDS COUNCIL,  
SOUTH DAKOTA SHEEP GROWERS ASSOC.,  
TEXAS SHEEP & GOAT RAISERS' ASSOC.,  
UTAH FARM BUREAU FED.,  
UTAH WOOL GROWERS ASSOC.,  
WASHINGTON STATE SHEEP PRODUCERS,  
WYOMING FARM BUREAU,  
WYOMING STOCK GROWERS ASSOC., and  
WYOMING WOOL GROWERS ASSOC.,

**Request for Reconsideration:  
Data Quality Act Challenge to  
U.S. Department of Agriculture  
Dissemination of Information  
Presented in "A Review of Disease  
Related Conflicts Between  
Domestic Sheep and Goats and  
Bighorn Sheep," General Technical  
Report RMRS-GTR-209**

Petitioners

v.

U.S. DEPARTMENT OF  
AGRICULTURE,

Agency.

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**REQUEST FOR RECONSIDERATION OF COLORADO WOOL GROWERS  
ASSOCIATION, ET AL. PETITION FOR CORRECTION OF INFORMATION FILED  
PURSUANT TO THE DATA QUALITY ACT**

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To: USDA Forest Service

Re: May 1, 2009 Response to Petitioners' Challenge, File Code: 2600/4200

Attention: George Vargas/Data Quality Official  
Mail Stop 1113, 1SW Yates Building  
1400 Independence Ave. SW  
Washington, D.C. 20250  
*Electronic Mail: gvargas@fs.fed.us*

**I. Petitioners' Request and USDA Forest Service's Response**

The Colorado Wool Growers Association, *et al.* ("Petitioners") hereby submit this Request for Reconsideration of the Petitioners' Challenge for Correction of Information ("Request") pursuant to the Federal Information Quality Act, (44 U.S.C. § 3516) ("Data Quality Act" or "DQA"), the "Guidelines for Ensuring and Maximizing the Quality, Objectivity, Utility, and Integrity of Information disseminated by Federal Agencies" issued by the Office of Management and Budget (67 Fed. Reg. 8452 (Feb. 22, 2002) ("OMB Guidelines")), as well as the United States Department of Agriculture's ("USDA") Information Quality Guidelines available at [http://www.ocio.usda.gov/qi\\_guide/index.html](http://www.ocio.usda.gov/qi_guide/index.html).

On May 1, 2009, Lorrie S. Parker, for Themla J. Strong, Director, Office of Regulatory and Management Services, provided the USDA Forest Service's Response to the Petitioners' Challenge ("USFS Response"), denying the Petitioners' Challenge.

In May of 2008, the United States Forest Service ("USFS") published *A Review of Disease Related Conflicts Between Domestic Sheep and Goats and Bighorn Sheep* by Timothy J. Schommer and Melanie M. Woolever, General Technical Report RMRS-GTR-209 ("USFS

Bighorn Report"). As outlined in the Challenge, Petitioners reviewed the USFS Bighorn Report and found it to be inaccurate, unreliable, and biased. Petitioners requested that the USFS retract the USFS Bighorn Report and all reliance thereon in existing and subsequent forest plans and forest plan amendments, as well as decisions on grazing permits and grazing permit renewals. Alternatively, the Petitioners requested that the USFS issue an amended USFS Bighorn Report that uses sound analytical methods and the best data available, ensuring transparency and objectivity in the information disseminated.

This Request for Reconsideration addresses the USFS's inadequate explanation for failing to retract or amend the USFS Bighorn Report. The Petitioners renew their concerns that the USFS Bighorn Report: (1) was developed with unsound research methods; (2) ignores studies that do not support its thesis; (3) jumps to conclusions that are not scientifically supported but are pure conjecture; and (4) disseminates information that is not objective or reliable and that lacks basic scientific integrity.

## **II. Petitioners Contact Information**

The Petitioners primary representatives can be reached at the following addresses:

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### III. Standard of Review

The Reconsideration Official (or panel) must ensure that the initial agency review of the Request for Correction was conducted with due diligence. *USDA Guidelines for Quality of Information*, available at [http://www.ocio.usda.gov/qi\\_guide/corrections.html](http://www.ocio.usda.gov/qi_guide/corrections.html). Due diligence is “the diligence reasonably expected from, and ordinarily exercised by, a person who seeks to satisfy a legal requirement or to discharge an obligation” (*Black’s Law Dictionary*, 8th Ed. 488) and “the care that a reasonable person exercises under the circumstances to avoid harm to other persons or their property.” (*Merriam-Webster On-Line Dictionary*, available at <http://www.merriam-webster.com/dictionary/due+diligence>). As discussed below in the Petitioners’ Request for Reconsideration, the agency review of the Request for Correction was not conducted with due diligence.

#### A. The USFS Bighorn Report Constitutes Influential Scientific Information

When a request for reconsideration involves influential scientific information, the USDA procedures require that the USDA to designate a panel of officials to perform the review function. *USDA Guidelines for Quality of Information*, available at [http://www.ocio.usda.gov/qi\\_guide/corrections.html](http://www.ocio.usda.gov/qi_guide/corrections.html). Typically, such a panel would include a Reconsideration Official from the USDA agency that made the initial determination and two from other USDA agencies. *Id.* In this case, the request involves the USFS Bighorn Report, which is used by USFS supervisors and staff to make decisions concerning existing and subsequent forest plans and forest plan amendments, as well as decisions on grazing permits and grazing permit renewals.

The errors contained in the USFS Bighorn Report are mistakenly influencing the USFS’s decisions about management of domestic sheep in all national forests. Moreover, reliance on this

biased and faulty information in the USFS Bighorn Report on forest plans or amendments thereto, as well as modifications or cancellations of grazing permits, has and will continue to harm the Petitioners and their members. The Petitioners and their membership have been negatively impacted by the dissemination of this false information regarding domestic sheep's capabilities to spread numerous diseases, including scabies, anaplasma, and babesia.

The Petitioners cannot adequately assess the USFS's justifications or rationale for proposing changes to management plans when based upon this misinformation. The Petitioners believe that USFS forest plans or amendments seek to manage for bighorn sheep to ensure a zero risk scenario, when they have no mandate to do so. Furthermore, the USFS Bighorn Report fails to address any studies or literature that examines risk assessments of range conditions that could assist in the health of bighorns. The Petitioners and their members will continue to be harmed if management decisions are based upon this unreliable, inaccurate, and biased information. In addition to the damage to the Petitioners and their members if there are reductions or changes to grazing permits based upon the false information in the USFS Bighorn Report, the local economies will be negatively impacted, and the local social and economic stability of these areas will be harmed by reducing or removing sheep producers. Consequently, the USFS Bighorn Report is influential scientific information and a panel should perform the review.

#### **IV. The USFS Response to the Petitioners' Request for Correction was not Conducted with Due Diligence.**

The USFS Response fails to meet the due diligence required by the USDA Information Quality Guidelines. The USFS Response states that "[w]e have addressed each of your concerns in the enclosed synthesis from our independent reviewers." The unnamed independent reviewers failed to review the Petitioners' Challenge with the diligence reasonably expected from, and

ordinarily exercised by, a person who seeks to satisfy a legal requirement or to discharge an obligation. Instead, as discussed below, the unnamed independent reviewers ignored clear and convincing information and examples of how the USFS Bighorn Report is inaccurate, unreliable, and biased.

**A. The USFS Response Mischaracterizes the Scope of the USFS Bighorn Report**

The USFS Response mischaracterizes the scope of the USFS Bighorn Report by asserting that the USFS Bighorn Report “did not include critiquing the studies cited, evaluating the methods used, or suggesting alternative conclusions or hypothesis that could have been reached.” USFS Resp. at 2-3, 20. It further describes the USFS Bighorn Report as “a review and synopsis of then-existing peer-reviewed scientific studies.” *Id.* at 19-20. However, the USFS Response notes on numerous occasions that the authors did make conclusions. *See, e.g., id.* at 4 (“...the authors’ review of the literature and their conclusions”); *id.* at 4 (“[the authors] acted appropriately in conducting a review of published research and in forming conclusions...”); *id.* at 6 (“reading the CAST Report leads to similar conclusions as the [USFS Bighorn Report].”).

Also, the USFS Bighorn Report states that its purposes are “to: 1) *review* the science related to disease, particularly respiratory disease, in sympatric populations of domestic sheep (*Ovis aries*) and goats (*Capra hircus*) and bighorn sheep (*Ovis canadensis*) and 2) *provide scientific foundation* for the development of agency policy.” USFS Bighorn Report at 1 (emphasis added). The USFS Bighorn Report then purports to summarize the “experimental methods and evidence relative to the hypothesis that bighorn sheep have a high likelihood of contracting fatal respiratory disease following contact with domestic sheep, characterized as the ‘contact hypothesis’” and address other hypothesis that are “refinements of the contact hypotheses.” USFS Bighorn Report at 3.

The USFS Bighorn Report made decisions on what literature to include and what literature to exclude. For example, the USFS Bighorn Report fails to include the study by Ward AC, Hunter DL, Jaworski MD, Benolkin PJ, Dobel MP, Jeffress JB, Tanner GA (1997) *Pasteurella spp. in sympatric bighorn and domestic sheep*. Journal of Wildlife Diseases, 33(3): pages 544-57, which reviewed several instances where the presence of domestic sheep did not adversely affect bighorn sheep. The USFS Bighorn Report then erroneously reports that “[n]o published reports could be found that document fenced or free-ranging bighorn sheep herds remaining healthy when living directly with domestic sheep herds.” USFS Bighorn Report at 9. The USFS Response characterizes the examples contained in the study as “not well documented,” but also notes that domestic sheep were at least observed with or in proximity of the bighorn sheep in all of the instances. *Id.* at 18. The USFS Response suggests that the USFS Bighorn Sheep authors did not include the study because they concluded the examples were not well-documented. This is incongruous to the argument that the USFS Bighorn Report merely provides an overview of the literature and does not reach conclusions.

If in fact the USFS Bighorn Report was a review of studies on bighorn sheep, then it should have included not only the Ward study, but others enumerated in the Petitioners’ Request for Correction. The USFS Bighorn Report is more than a simple review of the bighorn sheep literature. Rather, it is rife with conclusions about the contact hypothesis, and should be examined in such a light.

If the USFS Response is accurate in its description of the scope of the USFS Bighorn Report, then what usefulness does the USFS Bighorn Report provide? How can the USFS Bighorn Report provide a scientific foundation for the development of agency policy without reaching any conclusion, or conducting a critical evaluation of the scientific studies? And, how

could a panel of reviewers ensure that the manuscript was scientifically credible, defensible and met USDA's Information Quality Guidelines and OMB Guidelines if the report was merely an overview of scientific research studies?

Clearly, the USFS Response mischaracterizes the USFS Bighorn Report. The USFS Bighorn Report is more than a mere review of bighorn sheep literature and makes biased and inaccurate conclusions about the contact hypothesis.

**B. The USFS Response Fails to Recognize the Deficiencies of the Blind Review Process**

The USFS Response goes to great lengths to support the USFS Bighorn Report because it was subject to a "blind review process." USFS Resp. at 2, 7-8, 19-20. However, the USFS Response ignores the limited abilities of those who participated in the "blind review process."

While the four peer reviewers may have been "senior wildlife specialists and experts," the USFS Response's advocacy for wildlife specialists ignores the fundamental importance of genetic and immunology issues associated with the USFS Bighorn Report. *See* USFS Resp. at 2. The absence of at least one peer reviewer who has education or training in veterinary genetics, immunology and disease epidemiology results in a deficient "blind review process" that fails the high level of quality and objective peer review that is required by the USDA Quality Guidelines for Objectivity of Scientific Research and Regulatory Information as well as the due diligence standard in responding to DQA Challenges. *See* USDA's Scientific Research Guidelines/Peer Review, available at: [http://www.ocio.usda.gov/qi\\_guide/scientific\\_research.html](http://www.ocio.usda.gov/qi_guide/scientific_research.html).

The USFS Response also defends the USFS Bighorn Report's failure to identify known sources of error and limitation in the data by citing the "blind review process." A basic tenet of any valid, credible examination of scientific literature would include known sources of error and limitations in the data. It would appear then that the four independent reviewers did not have the

requisite knowledge and understanding of the USDA Regulatory Information Guidelines to support the conclusion that the USFS Bighorn Report was unbiased and accurate.

**C. The USFS Response Provides No Reasonable Explanation for the Failure to Correct a Biased Abstract**

The USFS Response dismisses concerns that the Abstract shows immediate bias. As the USFS Response states, the Abstract provides a very brief review of the literature and their conclusions. USFS Resp. at 4. The Abstract sets the tone for the reader, and directs the reader's attention to the conclusions made in the USFS Bighorn Report. Instead of refuting the claim that the Abstract is biased, the USFS Response labels the Petitioners' arguments as "semantics." A reasonable reader would draw the same conclusions as the Petitioners when reviewing the Abstract. Instead of taking the opportunity to rework or clarify the Abstract, the USFS seems comfortable with allowing the bias to remain, citing limitations inherent in the nature of the Abstract. Petitioners seek, among other things, to include an accurate description of all scientific conclusions concerning whether the *Pasteurellaceae* strain or other agents directly link bighorn epidemics to domestic sheep interactions, including the conclusion that disease transmission (*Pasteurellaceae*) under open range conditions has not been demonstrated unequivocally to date. In addition, the USFS Bighorn Report ignores the fact that bighorn sheep are carriers of bacteria. The Abstract, and the USFS Bighorn Report, fails to address what types of bacteria bighorn sheep persistently carry and how these bacteria could impact their own health.

The USFS Bighorn Report, thus, leads a reader to assume that "multiple bacteria strains" from domestic sheep have been identified as the cause for pneumonia in bighorn sheep. Yet, the same USFS Bighorn Report acknowledges that "the complete range of mechanisms/causal

agents leading to epizootic disease events **are not completely understood.**” (Emphasis added)  
USFS Bighorn Report at i.

**D. The USFS Response Fails to Provide a Reasonable Explanation for the Stark Differences Between the CAST Report and the USFS Bighorn Report**

The inference in the USFS Bighorn Report that science has proven that domestic sheep transfer fatal diseases to bighorn sheep comes into direct conflict with the findings of the Council for Agricultural Science and Technology (“CAST”) report entitled *Pasteurellosis Transmission Risks between Domestic and Wild Sheep* (“CAST Report”) published in August 2008, one month prior to the revised, second printing of the USFS Bighorn Report published in September 2008. The stark differences between the USFS Bighorn Report and the CAST Report merit reconsideration of the Petitioners’ Challenge. After a complete review of all literature and science regarding disease transmission between the two species, the CAST scientific committee and its reviewers found that:

Indeed, a common Pasteurellaceae strain or other agent directly linking bighorn epidemics to either domestic sheep interactions or to emergence of endemic pathogens **has not been demonstrated to date, and thus unequivocal evidence for either process remains elusive.** (Emphasis added) Miller *et al.* at 4.

After more than 80 years of research, scientists have never documented the transmission of disease from domestic sheep to bighorn sheep in the wild. The CAST Report states:

[R]elationships between the onset of some pneumonia epidemics in wild sheep and the concurrent presence of domestic sheep on bighorn ranges have been described (George *et al.* 2008; Monello, Murray, and Cassirer 2001). Whether introduced Pasteurellaceae strains, introduced virulence factors, or other introduced pathogens contribute to precipitating these epidemics **remains unclear** (Besser *et al.* 2008; George *et al.* 2008; Kelley *et al.* 2008). (Emphasis added) *Id.*

The USFS Response dispenses with the CAST Report by stating that the CAST Report was published after the May publication of the USFS Bighorn Report. However, the USFS

Bighorn Report was revised and republished in September 2008, and the USFS still failed to acknowledge the CAST Report findings. **The very same literature and science that was reviewed by the CAST committee was available to the authors of the USFS Bighorn Report prior to the completion and publication of both the May and September reports.** The USFS Response fails to discuss the different conclusions contained in the CAST Report by claiming that both reports lead to similar conclusions. Petitioners believe that the CAST Report's conclusions, while including an overview of the Payette Principles and WAFWA, does not support the conclusions of these documents. Also, unlike the USFS Bighorn Report, the CAST Report recognizes the lack of unequivocal evidence. The USFS Bighorn Report, drafted during the same time period as the CAST Report and republished in September after the publication of the CAST Report, would have considered the same literature, but yet came to a different conclusion. The USFS Response provides no explanation as to the different conclusions and consequently fails to address the stark differences between the two reports. As such, the USFS Response failed to conduct its review of the Petitioners' Challenge with due diligence.

**E. The USFS Response Dismisses an Accomplished Field Researcher on the Subject of Bighorn and Domestic Sheep Contact.**

The USFS Bighorn Report states that “[t]he following is a review and summary of the experimental methods and evidence relative to the hypothesis that bighorn sheep have a high likelihood of contracting fatal respiratory disease following contact with domestic sheep.” USFS Bighorn Report at 3. The science, however, does not necessarily support this hypothesis. To quote Marie S. Bulgin DVM, Dip ACVM, MBA, Coordinator, University of Idaho, Caine Veterinary Teaching and Research Center:

Myth, defined as a notion based more on tradition or convenience than on fact, (American Heritage Dictionary) seems to fit the Wildlife Biologists' clinging to the notion that contact with or the nearby presence of domestic sheep on the range

will automatically result in the demise of bighorn sheep. Seventeen years plus of research by numerous researchers has not been able to prove that such is the case. Bulgin, *Comment Concerning the Risk Analysis of Disease Transmission Between Domestic Sheep and Bighorn Sheep on the Payatte National Forest*, (2006).<sup>1</sup>

The USFS Response characterized Dr. Bulgin's conclusions as "opinion" and, incredibly, ignores that the USFS Bighorn Report cites U. S. Magistrate Judge Donald C. Ashmanskas' opinions on the contact hypothesis as fact! USFS Bighorn Report at 9. The Petitioners are unaware of any training, experience or education in wildlife management, immunology or genetics that Judge Ashmanskas holds that would provide him with the requisite knowledge to draw such conclusions.

**F. The USFS Response Ignores the USFS Bighorn Report's Failure to Reflect All Relevant Information**

The USFS Response admits that the USFS Bighorn Report "would have provided a more complete review of the science relating to disease in bighorn sheep" had it included all the conclusions from the Monello and others publication. USFS Resp. at 6. While the USFS Response concedes this point, it ignores the influence of the USFS Bighorn Report and determined that a "more complete review of the science" is unnecessary and that a less complete review of the science does not constitute "cherry-picking" information. *Id.* The USFS Response's failure to accept the Petitioners' correction is unreasonable as is the USFS failure to recognize that the most striking findings of the Monello and others publication is not even discussed.

The Monello publication found that 88% of pneumonia-induced die-offs occurred at or within three (3) years of peak population numbers. This finding suggests that density-dependent forces such as food shortage or stress are a principal contribution to bighorn sheep susceptibility to pneumonia. Instead of providing an adequate discussion of this finding, the USFS Bighorn

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<sup>1</sup> Submitted to Pattie Soucek, Forest Planner, Payette National Forest.

Report and the USFS Response conclude that “[t]he literature they reviewed supports the hypothesis that bighorn sheep have a high likelihood of contracting fatal respiratory disease following contact with domestic sheep.” USFS Resp. at 4.

Also, the USFS Bighorn Report wrongfully suggests that domestic sheep infest bighorn sheep with a mite that is host specific and with a disease that has not been present in the United States for more than thirty years! The USFS Response acknowledges that the USFS Bighorn Report “did not qualify their statements with the fact that scabies has not been reported in domestic sheep since the 1970s.” *Id.* at 8.

As a thorough review of the literature supports, all scientific documentation contradicts the assertion that domestic sheep transfer scabies to bighorn sheep. However, the USFS Bighorn Report relies upon mere speculation by some researchers decades ago that scabies outbreaks in bighorn sheep may have followed the introduction of domestic sheep.

The only quantified and reviewed scientific study involving the transmission of scabies between domestic and bighorn sheep was conducted in 1980 and 1981. Scientists found that the scabies mite found on bighorn sheep was host specific. F.C. Wright, F.S. Guillot, and W.P. Meleney in their paper, *Transmission of Psoroptic Mites from Bighorn Sheep (Ovis Canadensis mexicana) to Domestic Sheep, Cattle and Rabbits* [Journal of Wildlife Disease Vol. 17, No. 3, July 1981].

This study has been presented to the authors of the USFS Bighorn Report; however, they chose to ignore it and instead perpetuate the falsehood that domestic sheep can transmit scabies to bighorn sheep. And the USFS Response provides an inadequate explanation as to why the USFS Bighorn Report’s omission meets the Guidelines for Regulatory Information. In addition

to ignoring transmission studies involving scabies, the USFS Bighorn Report ignores the fact that scabies is not present in any domestic sheep in the United States.

The USFS Bighorn Report fails to comply with both OMB and USDA Regulatory Information Guidelines. Nowhere does the USFS Bighorn Report or the USFS Response explain the rationale for selecting certain data and deciding not to refer to other data, such as that referenced in the Petitioners' Challenge. In fact, the existence of significant data highlighting the uncertainty of USFS Bighorn Report's hypothesis is not even mentioned.

**G. The USFS Response Fails to Provide a Reasonable Explanation for the USFS Bighorn Report's Failure to Illuminate Known Sources of Error and Limitations in Data**

The USFS Response appears to ignore the numerous examples provided by the Petitioners of where the USFS Bighorn Report failed to identify known sources of error and limitations in the data. The one general theme used to dismiss said challenge is that the USFS Bighorn Report was subject to external peer review, such that objectivity was ensured. USFS Resp. at 7. This explanation falls short, particularly when the identity of the reviewers and their potential biases is shrouded in secrecy. The National Academy of Sciences' National Research Council makes public the names and affiliations of its reviewers when a report is released. *See* The National Academies, *Our Study Process: Ensuring Independent Objective Advice*, available at: <http://www.nationalacademies.org/studycommittee/process.pdf>.

While the USFS Bighorn Report recognized that unplanned pen experimentations lacked any experimental design, the authors failed to discuss key ramifications from the lack of experimental design. USFS Resp. at 8. This too falls short of addressing all the relevant information the reader needs to assess the validity of the experiments as they apply to the contact hypothesis.

Instead, the USFS Response criticizes the examples provided by Dr. Bulgin where penned bighorn sheep experience die-offs with no exposure to domestic sheep as “not directly relevant.” USFS Resp. at 11. Petitioners are at a loss for how this is not relevant. The examples provided include:

- Onderka and Wishart (1984) reported a major die-off of bighorn sheep not associated with domestic sheep. They attribute the disease to a strain of *P. haemolytica* unique to bighorn sheep.
- Buechner (1960), Sraaker et al. (1984), and Bailey (1986) reported die-offs in bighorn sheep without known exposure to domestic sheep.
- Data gathered by Goodson (1982) documented several bighorn sheep populations failing to thrive in the absence of domestic sheep grazing.

Also, Dr. C.S. Ward cautioned the USFS in July, 2006 that certain planned studies failed to take recent technical advances into account. The USFS Bighorn Report included the results of 10 experiments reported in five research articles, of which only three articles were peer reviewed. While the USFS Response ignores respected bighorn field researchers Drs. Bulgin and C.S. Ward for lack peer review, the USFS Response had no trouble supporting the inclusion of other articles that were not peer reviewed. Furthermore, the USFS Response could have called for the inclusion of a statement that new genetic techniques have been developed that may affect conclusions from prior studies. Yet, the USFS Bighorn Report is silent on this.

The pen studies reviewed and noted in the USFS Bighorn Report did not utilize these advances and did not, then, reflect the best available data. Moreover, the best available data concludes that transmission of disease from domestic sheep to bighorn sheep in the natural environment has not been scientifically proven. The USFS Bighorn Report does not clearly identify sources of uncertainty affecting data quality, i.e., the failure to employ scientific advances in sample collection and disease identification, but instead bases its conclusion that

domestic sheep can transmit disease to bighorn sheep upon unsound science used in the planned pen experiments study.

The USFS Bighorn Report also fails to discuss why the inoculation experiments reported in Foreyt and others (1994) were invalid. Dr. Foreyt inoculated the bighorn sheep with colonies of *pasteurella* 10,000 to 10,000,000 times the level necessary to cause disease. Death was inevitable. The inclusion of this study serves no utility other than to bias the reader. The USFS Response simply, and alarmingly, states that the methods used by Foreyt and others were “appropriate.” USFS Resp. at 15.

In addition, the USFS Bighorn Report fails to discuss how the bighorn sheep may contribute to their own die-offs. The USFS Bighorn Report does not address the impact of such stressors as the types of bacteria that the bighorn persistently carry and the regular translocation of bighorn sheep herds.

The USFS Response ignores the USFS Bighorn Report’s failure to identify known sources of error and limitations in the data. As such, the USFS Response failed to conduct its review of the Petitioners’ Challenge with due diligence.

#### **IV. The USFS Response was Arbitrary and Capricious.**

The U.S. Supreme Court has held that an agency decision is arbitrary and capricious “if the agency has relied on factors which Congress has not intended it to consider, entirely failed to consider an important aspect of the problem, offered an explanation for its decision that runs counter to the evidence before the agency, or is so implausible that it could not be ascribed to a difference in view or the product of agency expertise.” *Motor Vehicles Mfrs. Ass’n v. State Farm Mut. Auto Ins. Co.*, 463 U.S. 29, 43 (1983). Also, an agency action is arbitrary and capricious if the agency fails to “articulate a satisfactory explanation for its action including a

‘rational connection between the facts found and the choice made.’” *State Farm*, 463 U.S. at 43 (quoting *Burlington Truck Lines, Inc. v. United States*, 371 U.S. 156, 158 (1962)).

As discussed in the Petitioners’ Request for Reconsideration, there are numerous instances where the USFS Response fails to articulate a rational explanation for the conclusions contained in the USFS Response. For example:

- The USFS Response did not refute the claim that the Abstract shows immediate bias. Instead it dismissed the claim as “semantics” and expressed concern over the length of the Abstract.
- The USFS Response failed to explain why two separate reports, the USFS Bighorn Report and the CAST Report, drew dramatically different conclusions from a review of the same existing literature.
- The USFS Response conceded a more complete review of the science would have resulted if the USFS Bighorn Report had included all the conclusions from the Monello and others publication but failed to grant the Petitioners’ request for correction.
- The USFS Response failed to provide a reasonable explanation for the failure to include the Wright study in discussion of scabies and failed to recognize that scabies has not been present in the United States for over 30 years.
- The USFS Response failed to provide a reasonable explanation for why the Foreyt experiments were not invalid. The Foreyt experiments inoculated bighorn sheep with colonies of pasteurilla 10,000 to 10,000,000 times the level necessary to cause disease, ensuring certain death.

**V. The USFS Response to the Petitioners’ Request for Correction failed to follow the Open Government Directive issued by President Obama on January 21, 2009.**

On January 21, 2009, President Obama issued a memorandum to the Heads of Executive Departments and Agencies on the current Administration’s commitment to creating an unprecedented level of openness in Government. 74 Fed. Reg. 4685 (Jan. 26, 2009). The Memorandum notes that knowledge is widely dispersed in society. As such, public officials benefit from having access to that dispersed knowledge. The Petitioners’ Request for Correction

seeks the inclusion of information from recognized microbiologists such as Dr. Bulgin and Dr. Ward, both of the University of Idaho. In addition, the Petitioners' Request for Correction seeks the inclusion of examples of penned bighorn sheep die-offs without exposure to domestic sheep listed from the *Desert Bighorn Council Transactions*. Instead, the USFS Bighorn Report includes examples of unplanned penned bighorn sheep die-offs while ignoring a critical the lack of experimental design.

The Petitioners seek the inclusion of information in the USFS Bighorn Report that would provide an unbiased and accurate report on disease-related conflicts between bighorn sheep and domestic sheep and goats. Public officials would benefit from both examples, not just the examples that support the contact hypothesis. The agency's unwillingness to include the information contained in the Petitioners' Request for Correction is directly contrary to President Obama's directive.

**VI. The USFS Response to the Petitioners' Request for Correction failed to follow the Scientific Integrity Directive issued by President Obama on March 9, 2009.**

On March 9, 2009, President Obama issued a memorandum to the Heads of Executive Departments and Agencies on ensuring the highest level of scientific integrity in all aspects of the executive branch's involvement with scientific and technological processes. 74 Fed. Reg. 10671 (Mar. 11, 2009). Specifically, the President directed that when scientific information is considered in policy decisions, the information should be subject to well-established scientific processes.

The USFS Response indicates that the USFS Bighorn Report was subject to a "blind review process" by four senior wildlife specialists. However, the specialists conducting the "blind review process" did not have education or training in genetics, immunology, and disease

epidemiology. This results in a scientific review process that does not provide for the highest level of scientific integrity. The USFS Bighorn Report discusses at length genetic and immunology issues and as such should be subject to review by individuals with experience in these areas.

## **VI. Conclusion**

Through the Petitioners' Request for Reconsideration, the Petitioners renew their request the USFS retract the USFS Bighorn Report and all management decisions based upon the USFS Bighorn Report in forest plans, forest plan amendments, and grazing permits. Alternatively, the USFS could issue an amended USFS Bighorn Report that incorporates sound analytical methods and the best data available, ensuring transparency and objectivity in the information disseminated.

The USFS Bighorn Report clearly violates the Data Quality Act of 2002, the OMB Guidelines, and the USDA Regulatory Information Guidelines. Much of what the USFS Bighorn Report presents as "science" has no basis in scientific design or scientific evidence. According to both the OMB Guidelines and the USDA Regulatory Information Guidelines, the term "objectivity" includes whether disseminated information is presented in an accurate, reliable and unbiased manner. This also involves whether the information is presented within a proper context. The USFS Bighorn Report clearly fails on these points. The USFS Bighorn Report cherry-picked what scientific papers it wished to discuss, presented misleading information, and presented some information out-of-context. The USFS Response failed to provide reasonable explanations as to why certain information was included or excluded.

There is no scientific evidence that the severity of wild sheep die-offs are more pronounced after association with domestic sheep. Only in captive studies did bighorn sheep

react more severely, and much of this severity can be explained by the extremely high doses of bacteria used in the inoculations and with the stress of confinement itself. Also, the studies fail to address the impact of the bacteria persistently carried by the bighorn sheep. The USFS Response ignored this, and relied without explanation on the “blind review process.”

“Objectivity” also focuses on the information cited within the document. Sources need to be accurate, reliable and unbiased. Much of the information contained in the USFS Bighorn Report is not. The USFS Bighorn Report failed to address the limitations of the data used to reach its conclusions and failed to acknowledge that circumstantial evidence underlies most of the information presented. Repeatedly, the USFS Response concedes that the USFS Bighorn Report would have been more complete if certain information was included, i.e. the findings in the Monello publication. However, the USFS Response improperly denied the Petitioners’ Request for Correction.

According to the USDA Regulatory Information Guidelines, the USFS Bighorn Report should rely upon the “best available data,” yet studies using advanced scientific sampling and disease identification techniques were not included in the USFS Bighorn Report. Because the information disseminated in the USFS Bighorn Report is not objective, it also failed to have any utility for those persons making management decisions regarding grazing of domestic sheep and goats in national forests.

## **VII. Effect of the Aforementioned Errors**

The USFS Response dismissed the effect of the errors documented in the Petitioners’ Request for Correction. Instead, it improperly concluded that the future impact of the information is not relevant to the scientific credibility of the USFS Bighorn Report. The future

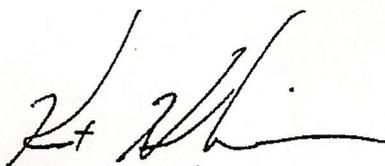
impact is decidedly relevant. The USFS Response concurred with some of the Petitioners' assertions, yet inexplicably failed to correct or retract the USFS Bighorn Report.

**VII. Recommendation and Justification for How the Information Should Be Corrected**

The Petitioners respectfully request the USFS retract the USFS Bighorn Report, General Technical Report RMRS-GTR-209, and all reliance thereon in existing and subsequent forest plans and forest plan amendments, as well as decisions on grazing permits and grazing permit renewals. Alternatively, the USFS could, as required by the OMB Guidelines, and the USDA Regulatory Information Guidelines, issue an amended USFS Bighorn Report that uses sound analytical methods and the best data available and ensures transparency and objectivity. An amended USFS Bighorn Report should incorporate all reliable information, not just the data supporting its false hypothesis; should identify the limitations of data used; should not state assumptions as fact; and should include the best available data as discussed herein.

Respectfully submitted this 11th day of June, 2009.

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