

Response to Objection Instruction F-1.

Clarify how direct contact from disease-carrying domestic sheep and goats is believed to contribute to the death of individual wild sheep, herds of wild sheep and entire populations and review the WAFWA Wild Sheep Working Group updated recommendations on disease transmission from domestic sheep and goats to wild sheep. Include review findings in the project record and clarify the reasons for special designation of the SNF bighorn sheep population.

Clarify how direct contact from disease-carrying domestic sheep and goats is believed to contribute to the death of individual wild sheep, herds of wild sheep and entire populations

Risk Analysis of Disease Transmission between Domestic Sheep and Goats and Rocky Mountain Bighorn Sheep (April 2012; Document #02235)

This document provides a thorough assessment of the risks to wild sheep from domestic sheep and goats. It reports that although there is no direct evidence of domestic goats and specifically pack goats infecting wild sheep with life/herd/population threatening diseases, there is an abundance of connected actions that lead to a reasonable conclusion that domestic sheep and goats are the vectors. The analysis also provides evidence that wild sheep are unpredictable in their movements and have been shown to travel great distances which can bring them into contact with domestic sheep and goats as well as other wild sheep. The methodology and conclusions in this document demonstrate consistency with national guidance for a risk analysis of this type as well as consideration of best available science, and recommendations from the Western Association of Fish and Wildlife Agencies (WAFWA), Wild Sheep Working Group, and biologists from the WGFD.

The *Risk Analysis of Disease Transmission* document provides evidence from a variety of peer reviewed and anecdotal sources of the threat to wild bighorn sheep populations from contact with domestic sheep and goats. Furthermore, the BE summarized these threats and provides an evaluation of potential outcomes and impacts to bighorn sheep under each alternative. There was limited discussion of reliance on mitigation measures provided by the public because the risk of any contact between domestic goats and the core populations of bighorn sheep was considered to be too great. This concern was addressed by the SNF in Response to comments: Public Concern #228 and reiterated within the DEIS.

The following is taken from:

Wild Sheep Working Group. 2012. Recommendations for Domestic Sheep and Goat Management in Wild Sheep Habitat. Western Association of Fish and Wildlife Agencies.

- **“it is WAFWA’s collective opinion that enough is known about potential pathogen transmission from domestic sheep or goats to wild sheep that efforts toward achieving effective separation are necessary and warranted. ”**
- “Reducing risk of disease transmission on the landscape by minimizing or preventing association between wild and domestic sheep or goats is a key management strategy for WAFWA agencies.”

Considering the above, it is only prudent to err on the side of caution to remove the potential for disease transmission to core native herds of bighorn sheep on the Shoshone while the use of pack goats is relatively limited on the forest. In the future, should research find there is no threat of disease transmission from goats, this protection measure may be changed by amending the LMP. Sadly, the potential impact to the Shoshone's unique bighorn sheep population could be devastating if the SNF continues to allow pack goats until research reaches a definitive conclusion regarding the mechanism of disease transmission from domestic sheep and goats.

Review the WAFWA Wild Sheep Working Group updated recommendations on disease transmission from domestic sheep and goats to wild sheep. Include review findings in the project record.

The following recommendations are taken from:

Wild Sheep Working Group. 2012. Recommendations for Domestic Sheep and Goat Management in Wild Sheep Habitat. Western Association of Fish and Wildlife Agencies.

Updated recommendations:

- It is WAFWA's collective opinion that enough is known about potential pathogen transmission from domestic sheep or goats to wild sheep that efforts toward achieving effective separation are necessary and warranted.
- **The higher the conservation value of a wild sheep population (e.g "sensitive species" status, core native herds), the more aggressive and comprehensive wild sheep and domestic sheep or goat separation management strategies should be.**

Specifically, land management agencies, such as the Forest Service should:

- **Prohibit the use of domestic sheep or goats as pack animals by persons that travel in identified wild sheep habitat** (WAFWA specifically cites the "Shoshone National Forest Supervisor's Office Order 02-14- 00-12-01. Temporary Area Closure to Domestic Goat Use" for this recommendation). Where legislation or regulations are not already in place, an outreach program to inform potential users of the risks associated with that activity should be implemented to discourage use of domestic sheep or goats as pack animals.
- Land management agencies that regulate or are responsible for domestic sheep or goat grazing allotments, trailing routes, vegetation management, use as pack stock, or any other uses involving domestic sheep or goats **should only authorize such use(s) outside of occupied wild sheep range.**
- Land management agencies should require marking of all permitted domestic sheep and goats to provide for rapid ownership identification of stray animals.
- Land use or resource management plans should explicitly address the potential for domestic sheep or goats to associate with wild sheep. Land use plans should evaluate the suitability of permitting activities involving domestic sheep or goats, and determine the best course of action with respect to wild sheep conservation. **Plans should also identify general areas of public land**

where domestic sheep or goats cannot be permitted for weed control, commercial grazing, recreational packing, vegetation management, or other uses.

- Reduce risk of association by eliminating overlap of domestic sheep or goat allotments or grazing permits/tenures within wild sheep habitat;

Clarify the reasons for special designation of the SNF bighorn sheep population.

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Northwestern Wyoming contains eight core native bighorn sheep herds in the Absaroka, Teton, Gros Ventre, and Wind River Ranges (WGFD 2010a). Core native herds are those herds that have never been extirpated and re-populated with transplanted bighorn sheep (Wyoming State-wide Bighorn/Domestic Sheep Interaction Working Group 2004). These are Wyoming's largest bighorn sheep populations and are the highest priority areas for bighorn sheep management in Wyoming (Wyoming State-wide Bighorn/Domestic Sheep Interaction Working Group 2004). The core native herds in northwestern Wyoming account for over 90 percent of the statewide total of bighorn sheep.

The Shoshone is occupied by six of the eight core native bighorn sheep herds in Wyoming. These core herds include: Francs Peak, Younts Peak, Whiskey Mountain, Trout Peak, Wapiti Ridge, and Clark's Fork. These core herds currently occupy 67 percent (1.65 million acres) of the Forest.

From Objection Response:

In addition, bighorn sheep are considered a Sensitive Species on the Shoshone. The Forest Service policy for sensitive species has been established for many years. Sensitive Species are designated as they are at risk for various reasons and were chosen to focus management efforts as a priority to preclude a trend toward listing.

We must also consider the special designation by Wyoming Fish and Game of the SNF bighorn population as being critical to the viability of the species range-wide.